Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons Injure	Esti Dai d <u>Prope</u> i	mated nage ty Crops	January 1994
ARIZONA									
AZZ008	25	1118MST			0	0	?	0	High Winds
South Central Deserts	part	ts of the Phoe	nix metro	politan are	a. Ap	ower li	ine was	downe	sty winds in excess of 40 mph to d by the wind and struck the aire caused extensive damage.
ARKANSAS									
ARZ001>049- Northern and Central Arkansas	16 17	CST- CST?			0	0	6	0	Winter Storm
	the and five tree busi pow and	16th and early northeast Ark inches. Howes and power inesses were yer at the heigh	on the 17 ansas. Sn vever, par lines we damaged at of the st	th. The are ow and ice ts of norther the knocked by fallen to orm. Nume	eas hard accum east Arl down rees. A	dest hit ulation cansas by the proxi	by the sover to receive weight mately ecidents	storm verified up to of the interest of the in	northern and central Arkansas on were across areas of north central hern sections ranged from one to eight inches. A large number of ice and snow. Many homes and electric customers were withou ted as a result of icy roads. Snow arkansas, as temperatures stayed
Union County El Dorado	17	0130CST			0	0	3	0	Gusty Winds (G45)
		sty winds associates and power l		n a cold fror	nt move	d thro u	igh the l	El Dora	do area and knocked down some
Miller County 2 N Dooley 2 N Dooley	25 25	1940CST 1940CST			0	0	0 2	0	Hail (0.75) Thunderstorm Winds
	Thu	ınderstorm wi	inds knoc	ked down s	some tre	ee limb	os.		
Hempstead County 5 E McNab	25	2010CST			0	0	3	0	Thunderstorm Winds
	Thu	ınderstorm wi	inds knoc	ked down s	several	trees.			
Montgomery County Norman Mount Ida	25 25	2247CST 2252CST			0	0	0	0	Hail (1.75) Hail (1.75)
Miller County 5 SW Garland City	26	0015CST			0	0	0	0	Hail (1.00)
Lafayette County 4 N Lewisville 4 N Lewisville	26 26	0030CST 0030CST			0	0	0 3	0	Hail (0.75) Thunderstorm Winds
4 IV Dewisvine		inderstorm wi	inds blew	down som			3	v	Thunderstorm winds
Crawford County				<b>40 11</b> 50 <b>111</b>					
Alma	26	0230CST			0	0	4	0	Hail (1.75)
		f ball-size ha	il damage	d some car					<b>YY H</b> (0.00)
5 N Alma	26	0236CST			0	0	0	0	Hail (0.88)
Polk County Potter	26	0320CST			0	0	4	0	Lightning
			a storage	building in	Potter	. A fir	e result	ed and	destroyed the structure.
Washington County 3 W Springdale	26	0438CST			0	0	0	0	Hail (0.75)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nui Pei Kille	mber of rsons	Esti Da d Prope	mated mage ty Crops	January 1994
ARKANSAS Cont	t'd								
Johnson County Knoxville	26	1705CST			0	0	0	0	Hail (0.75)
Newton County 2 W Deer 1 N Jasper Jasper	26 26 26	1730CST 1730CST 1736CST			0 0 0	0 0 0	0 0 0	0 0 0	Hail (0.75) Hail (0.75) Hail (0.75)
Little River County Foreman	26	1738CST			0	0	0	0	Hail (1.00)
Pope County Scottsville	26	1745CST			0	0	3	0	Thunderstorm Winds
	Thu	nderstorm wi	nds down	ed several	large t	rees.			
Boone County 5 N Dogpatch	26	1800CST			0	0	0	0	Hail (0.75)
Montgomery County Mount Ida Mount Ida	26 26	1830CST 1845CST			0	0	0	0	Hail (1.75) Hail (1.75)
Searcy County 1 SW Witts Spring	26	1830CST			0	0	0	0	Hail (1.00)
Conway County 3 N Center Ridge Center Ridge	26 26	1900CST 1920CST			0	0	0	0	Hail (1.00) Hail (1.00)
Yell County Danville	26	1915CST			0	0	0	0	Hail (0.75)
Van Buren County Fairfield Bay	26	1920CST			0	0	0	0	Hail (1.00)
Miller County 3 E Texarkana	26	2048CST			0	0	0	0	Hail (1.00)
Union County Junction City	26	2340CST			0	0	0	0	Hail (0.75)
Lonoke County Cabot	27	1500CST			0	1	0	0	Lightning
	line	ntning struck a and into the ered minor in	e residence	e where a	woma	n was t	talking	The ligh on the	tning traveled through the phone phone at the time. The woma n
Desha County McGehee	27	1600CST- 2300CST			0	0	6	0	Flash Flood
	dam	vy rains result age due to the Gehee were a	flood wate	ers. Twen	n McGe ty-five	ehee. Ap homes	p proxin were h	nately 1 eavily d	25 homes in McGehee sustained lamaged. A number of streets in
CALIFORNIA, N	orth	ern							
Fresno County Selma	15	0730PST			2	32	5	0	Dense Fog
Merced County Livingston	15	0730PST			0	8	4	0	Dense Fog

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estir Dan Proper	nated nage ty Crops	January 1994
CALIFORNIA, N	orth	ern Cont'd							
	acci 19 v its t	dent occurred	l at about wo fataliti	the same t	ime on	SR99 ir	n Merc	ed Cour	9 involved 48 vehicles. A thir daty and it involved an additional when a truck crushed a car and
CA02-07-09-10	23 24	1800PST- 1800PST			1	0	5	0	Heavy Snow
	The wind	storm also b	rought rai: 100 foot h	n and high igh pine tr	winds ee onto	to much a house	ı of the	e northe	ntains and in the Sierra Nevada. rn half of the state. In Oaklan d killed a man sleeping in his bed
CALIFORNIA, S	outhe	ern							
CAZ013- 023-	24 25	1720PST- 1600PST			0	0	0	0	Heavy Snow
	loca	rong cold fron tions above 5, tura County r	000 feet.	Average s	n Califo nowfall	ornia, w ranged	hich pr from s	oduced six to ter	heavy snow for many mountain n inches, with Pine Mountain in
CAZ501 8 W of Carlsbad	27 27	0800PST- 1000PST			0	0	0	0	Waterspout
	wate	vaterspout wa erspout was re damage was r	ported ab	d eight mil out ten mil	les wes les sout	t of Car hwest o	lsbad A f North	Airport Island	at 0909 PST. An unconfirme d Naval Air Station at 0818 PST.
CAZALL	27	All Day			0	0	0	0	Winter Storm
	regi	old upper leve on averaged i age.	l low pres near 0.50 i	sure systei inches. A	m move few mi	d over s nor mu	souther dslides	n Califo were re	ornia. Rainfall amounts over the eported at Laguna beach, but n o
CAZ013	27 27	1200PST- 2300PST			0	0	0	0	Heavy Snow
	falli	vy snow was ing above 3,0 orted at Mt. L	00 feet. '	n the San Three to so	Bernard even ind	lino Mo ches we	untain: re com	s and in mon, h	the Mt. Laguna area with snow owever, 14 inches of snow was
COLORADO									
COZ035	01	1600MST			0	0	0	0	High Winds (G62)
	A sp	otter three mi	les southea	ast of Este	s Park r	eported	a wind	gust to	72 mph (62 kts) at 1600 MST.
COZ035	01	1920MST			0	0	0	0	High Winds (G70)
	A gi	ust to 80 mph	(70 kts) v	was record	ed three	e miles s	southea	ast of Es	stes Park at 1920 MST.
COZ034-035-036 -038-039	02 02	0500MST- 1200MST			0	0	0	0	High Winds (G90)
	Sign MS	odic high wir	usts inclu 7 kts) in F	ded 105 m ort Collins	ph (90 at 054	Norther kts) atop 0 MST;	rn Fron Squa and 83	nt Range	e east of the Continental Divide. Itain near Idaho Springs at 0505 (2 kts) in Bailey in Park County
COZ035	03	0300MST		,	0	0	0	0	High Winds (G61)

A spotter 2.5 miles south of Estes Park reported a wind gust to 70 mph (61 kts) at 0300 MST.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured P		Esti Da 1 Prope	imated mage rty Crops	January 1994  Character of Storm
COLORADO Co	ont'd								
COZ036-038-040	03 03	0725MST 0900MST			0	0	5	0	High Winds (G86)
	99 n Flat Res	nph (86 kts) o s Facility in ervoir area	on Squaw N Northwest (five mile	Mountain ne t Jefferson es southwe	ear Idah County est of F	Sprin at 083 ort Co	gs at 08 87 MST Ilins).	825 MS Γ; and 8 The w	Significant high winds included T; 85 mph (75 kts) at The Rocky 5 mph (75 kts) in the Horsetooth inds blew down a house under plight at Horsetooth Reservoir.
COZ035-036	04 04	1630MST 2130MST			0	0	0	0	High Winds (G79)
	inch	iodic high w uded 91 mph Squaw Moun	(79 kts) at	Squaw Mo	ountain	r terrai near Id	n of th aho Sp	e North rings at	ern Foothills. Significant gust : 0645 MST; and 82 mph (71 kts)
COZ039-040	05 05	0400MST 0500MST			0	0	0	0	High Winds (G73)
	84 r were	nph (73 kts)	in southw	est Boûlde	r at 040	)9 MS7	Γ: and ′	74 mph	Some significant gusts included (64 kts) in north Boulder. There son County from Golden to south
COZ004-005-010 -033-034	05 06	0600MST 0600MST			0	0	0	0	Heavy Snow
	12 to	vy snow fell o 22 inches. I nches at Bre	Significant	amounts in	northe	rn and 22 incl	central hes at S	mounta steambo	ins. Snow amounts ranged from at Springs; 21 inches at Vail and
COZ035-036	07 07	0630MST 1320MST	-		0	0	0	0	High Winds (G86)
	Sigr	odic high w nificant wind linsville at 1	gusts inclu	eted portion ded 99 mp	ons of t h (86 k	he norts) at R	thern fo ollinsv	oothills ille at 1	east of the Continental Divide 140 MST and 91 mph (79 kts) at
COZ030-036	17 17	1300MST 1500MST			0	0	0	0	High Winds (G76)
	was	odic high wir recorded at S occurred at	Squaw Mot	ıntai near	Idaho S	Springs	at 142	5 MST.	A wind gust to 87 mph (76 kts) Winds estimated at 80 mph (70
COZ010-012-018 -034-061	25 27	1900MST 0400MST	-		0	0	0	0	Heavy Snow
	Sno	upper level st wfall amount	orm systen s averaged	15 to 25 in	ches. S	lignific	ant am	ounts in	central and southwest mountains, icluded 33 inches at Monarch ski 0 inches at Powderhorn ski area.
COZ038>050- 071>081- 090>092	26 26	0600MST 1300MST	-		1	0	0	0	Heavy Snow
	colo heav	l temperatur viest amounts	es to much were 12 in	n of eastern iches at Ida	n Colora lia (35 r	ado. S niles so	nowfall utheast	l amour of Yun	e winds brought heavy snow and its averaged 6 to 12 inches. The na); ten inches at Woodland Park niles west of Colorado Springs)

(20 miles northwest of Colorado Springs) and Ruxton Park (ten miles west of Colorado Springs). The Denver Metro area averaged five to seven inches.

A 37 year old man froze to death in Colorado Springs. He apparently slipped while trying to climb a concrete abutment and became trapped between a fence post and the abutment. He died of hypothermia. (M37O)

#### **COLORADO** Cont'd

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injure	Esti: Dai d <u>Proper</u>	mated nage ty Crops	January 1994
COZ070		2200MST- 2200MST vy snow fell hwest of Pue	over port						Heavy Snow es of snow fell at Rye (30 mile s
CONNECTICUT			,			(			
CTZ003-004- 008-011-012	03 04	2200EST- 0600EST			0	0	0	0	Heavy Snow
	resu	lted in heavy es was reporte	snow acc	cumulation	is over t	he east	t and so	utheast	Atlantic coast toward Cape Co d portion of the state. Up to eight I made difficult during the heavy
CTZALL	07 08	1200EST- 0900EST			0	0	?	0	Heavy Snow
CTZ005>012	07 08	2000EST- 0800EST			0	0	0	?	Glaze
	7th i porti repo freez mos glaz	into the morni ion of the state orted 15.4 inch zing rain along st schools we e, with the he	ng of the 8 e. The Naties, Litchfing the coast ere closed.	tth, productional Wea eld 12 inch after an a The free accumula	ced snow ther Servies, and laccumula zing rain tion in t	wfall to wice at l Bridger ation o n produ he exti	otals of of Bradley port 7.5 if five to uced on reme so	Internation of the control of the co	ecame heavy around noon on the e foot in the central and northern ational Airport in Windsor Locks Snow changed to sleet and then inches. Travel was difficult and er to three-quarters of an inch of Up to 2,000 electric customers tree limbs and power lines.
CTZALL	15 16	1800EST- 1800EST			0	0	0	0	Cold
	Stro valu zero low temp	ong northwes les from 30 to . The Nation temperature	t winds ac 50 below al Weathe of -8 de degrees	ccompanie zero. At er Service grees, equ shattered	d the co the high at Bradh aling the the old	old and nest ele ley Inte ne reco record	l drove evations ernation ord for for the	wind che, wind of al Airpothe date, value of the date, value of the date, value of the wind of the wind of the of	o near record low temperatures . nill indices to the extremely lo w chills dropped to 50 to 60 below ort in Windsor Locks recorded a e. At Bridgeport, the minimu m which was 7 degrees. Danbur y 16 degrees.
CTZALL	18 19	1800EST- 1000EST			0	0	0	0	Cold
CTZ001	19	1888EST-			0	0	0	0	Cold
	of 2 estal	25 to 35 deg	rees below deport on	w zero. A the morni	A new r	ecord	low mi	nimum	to 30 mph produced wind chills temperature of -2 degrees was wind chills continued all day on
CTZ001>004	27	0000EST- 1000EST			0	0	0	0	Cold
	drop -21	pping far belo	ow zero in ners and	the lowes Danbury,	st areas. -18 degi	Some	of the	lowest 1	ational cooling and temperatures temperatures included: Norfolk, 7; Thomaston, -16; and Bradle y
CTZ001	27 28	2200EST- 1200EST			0	0	0	0	Freezing Rain
CTZALL	28	1200EST- 2000EST			0	0	?	0	Heavy Rain
CONNECTICUT	Cont	t'd							-
CTZ010>012	28	1200EST- 1800EST			0	0	0	0	High Winds

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	nber of sons Injured	Esti: Dai 1 Proper	mated nage ty Crops	January 1994
New Haven County Southbury	29 30	0800EST- 0800EST			0	0	?	0	Flood
New London County Baltic	29	1200EST- 1800EST			0	0	?	0	Flash Flood
	state as fr there floo 50 d degr	e. Precipitation eezing rain in e. Heavy raiding. Up to d legrees in 15 rees in 30 hou	the north the north nfall and one foot of minutes ars occurre	s snow, the west hills melting s f water co at Bradley ed in parts	en chan until ar snow co vered s Intern of the	ged to a cound no mbine treets in ational state:	freezing oon on d to pr n some Airpor reading	g rain and January oduce wareas. It and a swent	er temperatures across the entire and finally rain, except it lingered 28th. Light glaze was reported widespread street and basemen to The temperature rose from 32 to mazing temperature rises of 7 0 from 20 below zero to 50 above. e south up to 40 to 60 mph.
	river even ice j drop over	rs and streams ning of January am at the Can oped to 10 fee bankfull in So	<ul> <li>The Ya</li> <li>28th and</li> <li>ada bridge</li> <li>The Poputhbury can</li> </ul>	ntic River continued compour mperaug I ausing stre	reached to rise nded pro River in ets to b	d flood to 13 to oblems northy e close	stage of feet in to early of vest Ne d and a	of eight he early on the 29 w Have numbe	ods and flash floods along small feet at Norwich during the early morning hours of the 29th. An 9th. Later in the morning, it had in County rose to four to six feet of people to be evacuated from a slowly on January 30th.
	leve mile Stre arou	ls rose six feet ice jam was re	in a matt eported on was repo nuary 29t	er of minu the river. orted spilli th, water le	ites, flo Twenty ng ovei evels re	oding a z-seven a dike ceded	nt least ' familie into the slowly.	75 homes were se town The lo	lted in a flash flood when water es and threatening others. A 2.5 evacuated along Main and River of Baltic. After the flash flood cal fire department reported that o decrease.
FLORDIA									
Broward County Ft Lauderdale	02	1530EST			0	0	0	0	Waterspout
	Pilot	ts, air traffic co	ontrollers a	and boaters	reporte	ed seve	ral wat	erspout	s offshore Ft. Lauderdale Beach.
Sarasota County South Pointe									
Shores	03	12500EST			0	0	2	0	Thunderstorm Winds
	Stro	ng wind gusts	damaged	l a screene	ed pool	enclosi	ıre.		
Polk County Frostproof	03	1445EST	0.5	15	0	1	5	3	Tornado (F1)
2.00 <b>.</b> p. 002	A to sign incl	rnado touched als as well a	down fou	r times cau	sing \$50	0 thous A 12-ve	and dar	nage to bov wa	cars, buildings, signs and traffic s cut by flying debris. Damage well as destruction of roof air
Polk County Waverly	03	1445EST	1.0	15	0	0	3	3	Tornado (F0)
v, averly	Eve	witnesses repo	rted a fun	nel cloud	touched	d down	in an o	range g	rove. Along a one mile path, the lamage to cars.
Alachua County Near LaCrosse 12 NW Gainesville	03	1705EST	short		0	0	3	0	Tornado (F0)
FLORIDA Cont'd									
		riff reported a l limbs.	orief torna	do which	did min	or dam	nage to	two mo	bile homes and blew down large
Bradford County E of Brooker 15 NNW Gainesville	03	1708EST	short		0	0	3	0	Tornado (F0)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width	Nun Per	nber of sons	Esti: Dar	mated nage	January 1994
110 2000	Hale	National	(wines)	(Tams)	Killer	- mymen		1 <u>y 1 11</u>	N. Character III. Shiftin
	A bı	rief tornado to	uchdown	tore up a	few she	eds and	blew sl	hingle	es off some houses.
Baker County S of Macclenny									
29 WSW Jackson- sville	03	1709EST	2.0	10	0	0	4	0	Tornado (F0)
	Seve	eral houses wer	e damage	ed and tops	of 60	foot pin	e trees	were	twisted off along a two mile path.
Clay County 32 NE Gainesville	03	1730EST			0	0	3	0	Thunderstorm Winds
	Pow	er lines were	blown do	wn.					
Duval County 10 S Jacksonsville	03	1730EST	short		0	0	4	0	Tornado (F0)
	A to	rnado heavily	damaged	l a mobile	home a	and dow	ned tre	es on	the west side of Jacksonville.
Nassau County 18 NW Jacksonsville	03	1730EST			0	0	2	0	Thunderstorm Winds
20 1 ( ) ( 0 002250235 ) 2220		nderstorm win	ds tore th	ne roof off	-	-		Ū	
Duval County 20 S Jacksonsville	03	1730EST			0	0	3	0	Thunderstorm Winds
20 5 deksonsvine		ds blew a larg	e "Lotto"	sign onto	-		_	v	Thunderstorm winds
St. Johns County 39 SE Jacksonsville	03	1750EST			0	0	0	0	Thunderstorm Winds
	Tree	es were blown	down ne	ar a Dog T	rack o	n U.S. F	Iighwa	y #1.	
Monroe County 20 SE Miami	18	0745EST			0	0	0	0	Waterspout
	Unit	ted States Coa	st Guard	reported se	everal	waterspo	outs of	fshore	e Key Largo.
IDAHO									
IDZ009 Panhandle	01 01	0000PST- 1700PST			0	0	0	0	Heavy Snow
		cal cooperative snow.	observer	at Priest F	River, 3	35 miles	north	of Co	eur d'Alene, reported six inches of
IDZ006 West Central	01 03	0000MST- 1800MST			0	0	0	0	Heavy Snow
Mountains	T .	eries of moist	· .1 ·	CD:					n a three day period at the town of
IDZ010	02	0400MST-			0	0	•	0	II
East Central Mountains	03	0400MST	ow snow	fall at the	0 town	0 of Gibb	0 onsvill	0	Heavy Snow miles north of Salmon. This was
	repo	orted by a local	l coopera	tive observ	ver.	or Groot	OHSVIII	e, 20	innes north of Sannon. This was
IDZ001	02 03	0745MST- 0745MST			0	0	0	0	Heavy Snow
	Mou	ıntain Home r	eceived e	ight inches	s of ne	w snow.			
IDAHO Cont'd									
IDZ006-011	05 06	0730PST- 0730PST			0	0	0	0	Heavy Snow
	The of n	west-central ar	a passin	g shortway	ntains o	of Idaho gh. The	receive snow	ed be fall w	tween a half foot and nearly a foot as greatly enhanced by orographic aches of snow. Taylor Ranch, 120

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Est Da Prope	imated mage rty Crops	Character of S	January 1994
	mile	s northeast of	Boise, re	ceived six	inches	of new	snow			
IDZ003 Upper Snake	08 09	0800MST- 0800MST	ŕ		0	0	0	0	Heavy Sr	10W
River Valley	Six	inches of new	snow fell	at Rexbu	rg, 75 n	niles no	orthwe	st of Po	catello.	
IDZ006 West-Central Mountains	08 09	1700MST- 1700MST			0	0	0	0	Heavy Sr	now
1,1041141115		man, 45 mile v fell at Idaho						es of ne	w snow, whi	le six inches of new
IDZ006	09 10	0730MST- 0730MST	, ,		0	0	0	0	Heavy Sr	now
		ocal cooperations of new sno		er at And	erson R	anch R	Reservo	oir, 50 n	niles east of	Boise, recorded si
IDZ005 Southwest	09 10	1600MST- 1600MST			0	0	0	0	Heavy Sr	10W
Highlands	A m	oist storm syst	em depos	ited 11 inc	ches of	snow a	t DeLa	mar Mi	ne, 50 miles	southwest of Boise.
IDZ001	09 20	2200MST- 1100MST			0	0	0	0	Dense Fo	g
	two and Hom the s	weeks. Areas early mornin ne, with visibil	of dense for the second of dense for the second of the sec	og formed In most ca ently less t	almost e uses the han one	every da fog foa -quarte	ay of the rmed in er mile.	nis e ven n areas The ir	t, especially between Cal oversion slow	ary and lasted nearly during the late night dwell and Mountai it ly weakened during the month, but it was
ILLINOIS										
ILZ001-102	15 19	0000CST- 2400CST			0	0	0	0	Severe C	old
	before were Rock at R Peor Chick include temp was cold of temps from hom	re an even stree in northern kford and Moliockford. Low ria, -21 at CF cago and -14 aded -19 in Choeratures below accompanied air resulted in emperatures -tbite and hyp	onger outh Illinois. I ine. Maxin vs on the nicago, -2: at Rockfoi icago, -21 v zero. Spr by strong frozen and 10 or cold othermia.	preak of concount to the concount of conco	old air a eratures to 15th v to -16 to to and - ll-time r -23 at M ad a hi gl sulting i atter pip tater pip tad never re some factors	rrived of the vere -4 -18 in 123 at Fecord I for line a fin winder occurs deaths includingly the record of the very second secon	on the e 15th in Chi in	18th an ranged cago, -9 rn Illino rd. Maximum at Roc ow of - of 40 t mains. Of the result of the res	d 19th. The offer from -17 in peoria, -1 is. On the 18 is imum temperature kford. Even 16 on the 18 o 50 below 2 Chicago had here were nurbuted to cold	deration on the 17th coldest temperatures in Chicago to -21 a 10 at Moline and -13 8th lows were -18 a ceratures were -11 a so Lows on the 19th southern Illinois had th. The cold weather tero and colder. The seven days in a row merous incidents of d in Chicago amon gontributed to death.
Southern Illinois ILZ081-094	16 17	1200CST- 1200CST			0	0	?	?	Winter S	torm
ILLINOIS Cont'd	A m	ajor winter st	orm broug	tht freezin	g precip	oitation	follov	ved by l	neavy snow t	o southern Illinois-
	of si	nly the night on the night of t	and busin	esses wer	e closed	ea rece l while	ived or road c	ne-half rews st	inch of ice, t ruggled to cl	hen six to ten inches ear snow in the sub-
Northeast Illinois ILZ005-006- 011>014-019-020	26	1800CST.								

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	nber of sons Injured	Estir Dan Proper	nated nage ty Crops	January 1994
	27	1800CST			0	0	?	?	Ice Storm
	the r deve The amo ice o Fort	night of the 26 eloped in the w heaviest rain t unts included covered roads	th and movest and not fell in Kan 1.43 at B s and stors o sixty th	orning of the orth suburbe, northwe arrington, m drains recousand cu	ne 27th. os of Ch st DuPa 1.80 at esulted istomer	During icago for the second se	g the da from no hwest ( ospect, a ding of withou	y on the rtheast Cook ar and 2.3 streets, t powe	0.25 to 0.50 inch of ice - mainly e 27th, a convective band of rain LaSalle County to Lake County. In a convective band of rain LaSalle County to Lake County. Rainfall 1 at Elgin. Heavy rain falling on basements and low lying areas . In some for several days. Some enaburbs.
INDIANA									
INZ001>092 Entire State	14 21	?CST- ?CST			3	?	6	?	Extreme Cold
	dail temp of Ir stati incl Evan -30 of the Three fron	y minimum to cratures were adiana was est on at New Wuded an all or colder on the Bloomingtor ee people in New Mypothermington hypothermi	emperature recorded ablished whiteland in time recorder Wayre 19th inches Airport Vanderbura in her h	res below on the mor with a readin in Johnson ord low of he, and -21 luded Cam with -33, S rgh County ome, a 77	zero ea ning of ng of -36 County -27 at at Sout bridge Collem worded a year old	Januar Januar Sat the Othe Indian th Bend Sity with 11th -32 s a resu d male	from Jy 19, when the second apolis, and a line is the second apolis, and a line is the second apolis, and a line is the second a line is the second and a line is the secon	anuary nen a n al Wea low te and rec e locati fartins ille wi e extres	nuary. Many locations recorded 14 to January 21. The coldes t ew record minimum for the state ther Service cooperative weather mperatures recorded on the 19th cord lows for the day of -17 a t ons with official temperatures of ville with -35, Spencer with -33, ith -31, and Brookville with -31. me cold. A 79 year woman died a exposure while working on hi s his car. (F79P)(M77O)(M46V)
INZ030-032>092 Central and Southern Indiana	16 17	1600EST- 1200EST			0	?	5	0	Heavy Snow/Ice Storm
	Indi to si Hov Hari part follo	ana one-quar now. Most o vever, heavious rison, Floyd, s of Spencer	ter to one- f central er amount and Clark and Perry n, with so	-half inch and south s fell in ex Counties, Counties me schools	of freez ern Indi xtreme and clo Many remain	ing raiding raiding raiding reserved to a souther to a so	n accum ceived in India a foot of esses an sed for a	nulated betwee na, wit snow d schoon	rn Indiana. In parts of souther n before the precipitation changed n six and nine inches of snow. h 16 inches being reported over being reported over the southern ols were closed for several days e week. Many roads in southern
IOWA									
IAZ003>009- 014>019-022>030- 033>042-045>054- 058>067-070>079-	02 02	0600CST- 2100CST			0	0	5	0	Snow/Heavy Snow
082-087-098 Much of Iowa	the I band snow inch even	Dakotas into not not snow develor. The snow for the snow we not of the winter	orthwest Neloped ove fell at a ratere receive er season	Missouri bor Iowa. Me of abouted from cefor Iowa.	efore tu Iuch of an inch ntral an The sys	rning n the stat per ho d north tem sta	nore eas te receiv our at its least Iov arted ou	tward. yed any heavie va. Th t as free	an Alberta Clipper, raced across As the low approached, a broad where from four to six inches of est. A few reports of up to seven is was the first widespread snow ezing rain for a brief period over ury, Monona, and Crawford
IOWA Cont'd	chan beca fact	nged over to sr nme snow pac	ow allevia ked. Ma s very litt	ating much jor disrupt le wind as	of the ion of t sociated	proble: ravel d l with i	m. Else lid not o it. The	where, ccur w powdei	a couple of hours, then the rai n highways became slick as roads ith this system due mainly to the y nature of the snow could have
IAZ001>099 All of Iowa	14 16	0300CST- 0600CST			1	0	5	0	Extreme Cold
	Foll		assage of	a closed u	pper lev		m syste		rong arctic high pressure syste m

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons L Injure	Esti Da d Prope	mated mage rty Crops	January 1994 Character of Storm
	record low prob not	rd low temper for the date plems resulted turn over. Or	atures wer for exam from the c ne elderly	e set. The ple. Wind old. For the woman die	mercu chill i most ed in I	ry in M ndices part, th Boone.	Iason C dipped ey wer The ex	City dipp to -40° e frozen kact circ	n Iowa in over four years. A few bed to -28°, establishing a record of to -65° across the state. Some in water pipes and cars that would cumstances of just how were no t on the 14th. (F780)
IAZ001>099 All of Iowa	17 20	0600CST- 1000CST			0	0	5	0	Extreme Cold
	Mid rema east- wate for the of it hove temp the drop read Wat	lwest. This ained below ze-central Iowas ber pipes were read to the first time in the first time in the first time in the peratures were morning of the perature of the peratu	low was fare in marker uggled to five the five to five the five en Des -50° to -8 generally he 20th affat Wauko Saratoga of to -33° of to -33° of to -33° of the first	followed by any areas of it or reach -15° Thousand we years due Moines Interested in the -15° ter a couple on a. This is on 15 Januar	y an e the sta for a s of ca e to th ernation to -25 e inches would y 1965	ven co te for t maxim ars wou e cold onal Ai ach of 5° rang es of no be the	lder highree danum ten ald not a weather the time. The ew snow a coldest	gh press ys. In f nperatur start. M r. Unite nd Chic ne betw coldest w had f st tempe known	st flow, passed through the upper sure system. High temperature s fact, many areas of northeast and re on the 18th. Reports of frozen Most schools in Iowa were closed ed Air Lines canceled all but one cago O'Hare. Wind chill indice seen the 17th and 18th. Actual actual temperatures occurred on allen. Unofficially, the mercur y crature recorded in Iowa since a official low was -37° at Elkader. ee of their all time record low set
IAZ041-042- 051>054-061>099 Southern and East-central Iowa	26 27	1300CST- 0300CST			0	0	5	0	Freezing Rain
IAZ001>009- 012>019-020>026- 031>035 Northwest and North-central Iowa	26 27	1600CST- 1000CST			0	0	4	0	Snow and Heavy Snow
IAZ010-011- 027>030-035>040- 043>050-055>060 West-central, Central and	26 27	1600CST- 0500CST			0	0	4	0	Freezing Rain/Sleet

A strong arctic high, in excess of 1050 mb, was located over southern James Bay. A storm system developed over the southern plains and moved northeast. Very warm and moist air was drawn north ahead of the low. Surface dew point temperatures in the lower to middle 60s reached as far north as Oklahoma. This warm moist air was lifted over a shallow arctic dome of air over Iowa. This situation set the stage for widespread freezing precipitation. Freezing rain broke out during the early situation set the stage for widespread free zing precipitation. Freezing rain broke out during the early afternoon of the 26th over southwest Iowa. Roads became very icy in a short period of time a s surface temperatures were in the middle 20s. Several school districts closed early due to the icy conditions in southwest Iowa. The precipitation spread east during the afternoon and evening hours. Significant icing was reported across all of southern and east-central Iowa. Some thunder was also reported with the freezing rain. The ice was thick enough to cause significant travel problems, but not thick enough to cause widespread downed trees and power lines. The freezing rain ended during the late evening and early morning hours when the dry slot aloft swept over the area. To the north of the freezing rain area, a band of sleet fell. From the west-central, through the central, into the northeast counties of the state, moderate sleet fell for a period of several hours. Some freezing rain was mixed with the sleet, but for the most part the precipitation

#### IOWA Cont'd

Northeast Iowa

fell as sleet. Many areas reported sleet accumulations of one to two inches. Roads became quiet icy and travel was disrupted. The heaviest period of sleet in the Des Moines area occurred during the rush hour and early afternoon. Accidents were quiet numerous and most activities planned for the evening of the 26th were canceled. North of the sleet are a, the problem was snow and blowing snow. Temperatures in the upper teens and 20s, combined with winds of 20 to 35 MPH caused widespread blowing and drifting of snow. Near blizzard conditions were reported in open areas. Generally speaking, snowfall over the northwest and north-central counties was in the three to five inch range. Spotty reports around six inches were received. The extreme northwest corner of the state was hard hit with heavy snow. Five to as much as ten inches of snow fell in that area. Some of the heaviest

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nui Pei Kille	mber of rsons	Esti Dar d <u>Prope</u> r	mated mage rty Crops	January 1994
	Dak	ota. After the	main stor	m system j began Th	passed e freez	northe	ast of th	e state,	hes at nearby Sioux Falls, South an extended period of very light the state into the early morning surfaces, but was not significant
LOUISIANA									
Terrebonne Parish Montegut	17	1030CST	0.5	25	0	0	3	0	Tornado (F0)
Montegut		eak tornado, v							thed down snapping seven power
DeSoto Parish 3 NE Mansfield	26	2030CST			0	0	0	?	Hail (1.00)
Caddo Parish Four Forks	26	2040CST			0	0	2	?	Thunderstorm Winds
Bossier Parish 3 E Elm Grove	26	2102CST			0	0	2	?	Hail (0.75) Thunderstorm Winds
Red River Parish 3 SE Markham	26	2120CST			0	0	2	?	Hail (1.75) Thunderstorm Winds
Bienville Parish 2 S Jamestown	26	2123CST			0	0	2	?	Thunderstorm Winds
Natchitoches Parish 4 NW Powhatten	26	2128CST			0	0	2	?	Hail (0.88) Thunderstorm Winds
Webster Parish Heflin	26	2130CST			0	0	2	?	Thunderstorm Winds
Bienville Parish Bryceland	26	2134CST			0	0	?	?	Hail (1.00)
Jackson Parish 2 S Jonesboro	26	2215CST			0	0	2	?	<b>Thunderstorm Winds</b>
Winn Parish Dodson	26	2217CST			0	0	2	?	Thunderstorm Winds
Lincoln Parish Clay	26	2220CST			0	0	2	?	Thunderstorm Winds
Caldwell Parish Vixen	26	2247CST			0	0	2	?	Hail (0.88)
2 S Holum	26	2320CST			0	0	2	?	Thunderstorm Winds Thunderstorm Winds
Franklin Parish 2 E Swampers Griffin	26 26	2325CST 2325CST			0	0	2	?	Hail (1.00) Hail (1.00)
Richland Parish 2 S Oak Ridge	26	2340CST			0	0	?	?	Thunderstorm Winds
LOUISIANA Con	t'd								
Madison Parish 3 N Quincy 2 NE Newlight	27 27	0010CST 0020CST			0	0	2 2	?	Thunderstorm Winds Thunderstorm Winds

Severe thundertorms producing scattered reports of damaging winds and large hail moved acros s north Louisiana during the evening of January 26th and early morning of January 27th. Reports from emergency management officials and newspaper accounts indicate most of the damage consisted of downed trees and tree limbs, and reports of hail up to the size of golf balls. A barn near Quincy was damaged from the wind gusts. Unofficial wind observations included: 62 mph gusts at Dodson, and 62 mph gusts at Vixen. The weather system responsible for the severe thunderstorms continued south

Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nur Per Kille	nber of sons	Esti Dai Proper	mated mage rty Crops	January 1994
and the 2	east across Lo 26th and 27th	ouisiana p . These co	oroducing sonditions a	severe re deta	weather	and fl	ooding	in other portions of Lousiana on
26 26	2320CST 2340CST			0	0	?	?	Hail (1.75) Thunderstorm Winds
26	2350CST			0	0	2	?	Thunderstorm Winds
27	0415CST			0	0	?	?	Hail (1.75)
A fe	ew severe thu d gusts was co	nderstorm onfined to	ns develop a downed	ed ove tree li	r south mbs and	Louisia l a few	ana prod downed	lucing large hail. Damage fro m l trees.
27 27	0600CST- 1900CST			0	0	5	?	Flash Flood
27 27	0800CST- 1900CST			0	0	5	?	Flash Flood
27 27	1000CST- 1900CST			0	0	?	?	Flash Flood
27 27	1100CST- 1700CST			0	0	?	?	Flash Flood
27 27	1200CST- 1700CST			0	0	?	?	Flash Flood
27 27	1400CST- 2100CST			0	0	?	?	Flash Flood
27 27	1200CST- 1900CST			0	0	?	?	Flash Flood
27 27	1200CST- 2100CST			0	0	?	?	Flash Flood
27 27	1100CST- 2100CST			0	0	?	?	Flash Flood
27 27	1100CST- 2100CST			0	0	?	?	Flash Flood
27 27	1100CST- 2100CST			0	0	?	?	Flash Flood
	and the 2 26 26 27 A fee wind 27 27 27 27 27 27 27 27 27 27 27 27 27	and east across Letthe 26th and 27th.  26	and east across Louisiana p the 26th and 27th. These co 26 2320CST 26 2340CST 27 0415CST  A few severe thunderstorm wind gusts was confined to 27 0600CST- 27 1900CST 27 1000CST- 27 1700CST 27 1200CST- 27 1200CST	and east across Louisiana producing sthe 26th and 27th. These conditions at 26 2320CST 26 2340CST 27 0415CST 27 0415CST 27 0400CST 27 1900CST 27 1900CST 27 1900CST 27 1900CST 27 1700CST 27 1200CST 27 1100CST 27 2100CST	and east across Louisiana producing severe the 26th and 27th. These conditions are deta 26 2320CST 0 26 2340CST 0 0 27 0415CST 0 0 27 0600CST-27 1900CST 0 0 27 1100CST-27 1200CST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Date         Standard         (Miles)         (Yards)         Killed         Injured           and east across Louisiana producing severe weather the 26th and 27th. These conditions are detailed below.         26         2320CST         0         0           26         2340CST         0         0         0           26         2350CST         0         0         0           27         0415CST         0         0         0           27         0400CST-         0         0         0           27         0800CST-         0         0         0           27         1000CST-         0         0         0           27         1000CST-         0         0         0           27         1400CST-         0         0         0           27         1200CST-         0         0         0           27         1200CST-         0         0         0           27         1200CST-         0 <td>and east across Louisiana producing severe weather and fl the 26th and 27th. These conditions are detailed below.  26  2320CST</td> <td>and east across Louisiana producing severe weather and flooding the 26th and 27th. These conditions are detailed below.  26  2320CST</td>	and east across Louisiana producing severe weather and fl the 26th and 27th. These conditions are detailed below.  26  2320CST	and east across Louisiana producing severe weather and flooding the 26th and 27th. These conditions are detailed below.  26  2320CST

A nearly stationary area of rain and embedded thunderstorms produced heavy rain across much of central and south Louisiana from the late evening hours of the 26th through the afternoon of the 27th. Storm total rainfall of six to eight inches was common in a large swath from southwest and west-central Louisiana into east-central Louisiana. Within this area, rainfall totals of eight to twelve

#### LOUISIANA Cont'd

inches occurred in Vernon and Rapides Parishes, overewhelming drainage capacity, and resulting in the most serious flash flooding. The Louisiana Office of Emergency Preparedness (OEP) reported that up to 12 inches of water flooded 20 houses, two multi-family units, and five businesses in Rapides Parish, primarily in the Alexandria area. Widespread street flooding was reported in many communities in Rapides Parish, and many secondary roadways were flooded. In Vernon Parish, the Office of Emergency Preparedness (OEP) reported four houses had major flood damage with 20 others having minor flood damage. Major flood damage was reported to 12 mobile homes in Vernon Parish and 20 others had minor flood damage. Extensive flooding of secondary roadways was reported in Vernon Parish, and heavy rainfall contributed to the derailment of a freight train due to washed out tracks. In the remaining parishes which reported flash flooding, the effects were primarily confined to flooding of secondary roadways, many of which were closed during the day of

Reauregard Parish   DeRidder   27   1510CST   0   0   2   ?   Thunderstorm Winds	Location	Date	Time Path Local/ Length Standard (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons	Esti Dai	mated nage	January 1994
Selection   Parish   4   E to 6   Selection   Parish   4   E to 6   Selection   Parish   2   1520CST		Janu	uary 27th.	,		J		, ,	
Tensas Parish SW Coolerpoint ZP 1520CST		Juna	ury 27tii.						
Mest Feliciana Parish   Angola   Ango	DeRidder	27	1510CST		0	0	2	?	Thunderstorm Winds
Tangipahoa Parish   28   1845CST   0   0   0   2   2   2   3   Thunderstorm Winds		27	1520CST		0	0	3	?	Thunderstorm Winds
Mashington Parish Franklinton   St. Tammany Parish   St. Tammany Pari		27	1730CST		0	0	2	?	Thunderstorm Winds
St. Tammany Parish   St. Tammany Parish   St. Tammany Parish   Severe thunderstorms produced damaging wind gusts at a few locations in central and sout he clausiana. The damage was primarily confined to downed tree limbs or small trees. A farm building was damaged by fallen trees near Coolerpoint. An automated wind gust to 64 might but Lake Pontchartrain south of Mandeville.    Tangipahoa Parish   28		27	1745CST		0	0	2	?	Thunderstorm Winds
S Mandeville   27 2020CST	Washington Parish Franklinton	27	1845CST		0	0	2	?	Thunderstorm Winds
Louisiana. The damage was primarily confined to downed tree limbs or small trees. A farm building was damaged by fallen trees near Coolerpoint. An automated wind gage recorded a wind gust to 64 mph on Lake Pontchartrain south of Mandeville.  28 0600CST- 0 0 0 ? Flood  Washington Parish  28 0600CST- 31 0600CST		27	2020CST		0	0	0	0	Thunderstorm Winds (G58)
Washington Parish  28   0600CST-   0   0   2   2   Flood  Rainfall totals of five to seven inches in the upper reaches of the Tangiphaoa and Bogue Chitto Rives caused flooding along these rivers in Tangipahoa and Washington Parishes on January 28-31. The Bogue Chitto River crested at Franklinton on the 30th at 17.5 feet, 5.5 feet above flood stage. Louisiana Office of Emergency Preparedness reported approximately 25 dwellings had mostly minor flood damage in Franklinton. The Tangipahoa River crested at Tickfaw on the 29th at 23.5 feet, 5.5 feet above flood stage. Several secondary roads near the Tangipahoa River were flooded.  MAINE  MEZALL  04   0300EST-   0   0   2   0   Heavy Snow  A pair of low pressure systems tracking northeast along the northern New England coast deposited up to 19 inches of new snow in extreme northwestern Maine, and 6 to 12 inches across most of the remainder of the state.  MEZ024-026-   04   1000EST-   0   0   2   0   High Winds  MAINE Cont'd  MEZ024-026-   04   1000EST-   1200EST   0   0   Righ Winds  MAINE Cont'd  MEZ024-029   04   1200EST-   1230EST   0   0   0   0   0   0   0   0   0		Loui was	isiana. The damage wa damaged by fallen tree	as primarily o es near Cool	confined erpoint	d to dow	vned tre	e limbs	or small trees. A farm building
Rainfall totals of five to seven inches in the upper reaches of the Tangiphaoa and Bogue Chitto Rives caused flooding along these rivers in Tangipahoa and Washington Parishes on January 28-31. The Bogue Chitto River crested at Franklinton on the 30th at 17.5 feet, 5.5 feet above flood stage. Louisiana Office of Emergency Preparedness reported approximately 25 dwellings had mostly minor flood damage in Franklinton. The Tangipahoa River crested at Tickfaw on the 29th at 23.5 feet, 5.5 feet above flood stage. Several secondary roads near the Tangipahoa River were flooded.  MAINE  MEZALL  04 0300EST- 05 1000EST  0 0 0 ? 0 Heavy Snow  A pair of low pressure systems tracking northeast along the northern New England coast deposited up to 19 inches of new snow in extreme northwestern Maine, and 6 to 12 inches across most of the remainder of the state.  MEZ024-026- 04 1000EST- 0 0 0 ? 0 High Winds  MAINE Cont'd  High winds buffeted parts of the Maine coast as dry air intruded into a coastal winter storm. Winds gusted as high as 70 mph at Cape Elizabeth and Monhegan Island. Extremely rapid pressure falls accompanied the winds. At Portland, the pressure fell eight millibars in less than half an hour.  MEZ024>029  04 1200EST- 0 0 0 ? 0 Coastal Surge  A mysterious surge of seawater hit several harbors a long the Maine coast at about mid-tide, suddenly raising water levels by four to six feet. Several fishing boats were damaged at their moorings. The surge traveled up the Penobscot and Orland Rivers, causing damage to a dam in Orland as ice and water overflowed it.	Tangipahoa Parish	28 30	0600CST- 1800CST		0	0	?	?	Flood
caused flooding along these rivers in Tangipahoa and Washington Parishes on January 28-31. The Bogue Chitto River crested at Franklinton on the 30th at 17.5 feet, 5.5 feet above flood stage. Louisiana Office of Emergency Preparedness reported approximately 25 dwellings had mostly minor flood damage in Franklinton. The Tangipahoa River crested at Tickfaw on the 29th at 23.5 feet, 5.5 feet above flood stage. Several secondary roads near the Tangipahoa River were flooded.  MAINE  MEZALL  04 0300EST- 05 1000EST  0 0 0 ? 0 Heavy Snow  A pair of low pressure systems tracking northeast along the northern New England coast deposited up to 19 inches of new snow in extreme northwestern Maine, and 6 to 12 inches across most of the remainder of the state.  MEZ024-026- 027  04 1000EST- 1200EST  0 0 ? 0 High Winds  MAINE Cont'd  High winds buffeted parts of the Maine coast as dry air intruded into a coastal winter storm. Winds gusted as high as 70 mph at Cape Elizabeth and Monhegan Island. Extremely rapid pressure falls accompanied the winds. At Portland, the pressure fell eight millibars in less than half an hour.  MEZ024>029  04 1200EST- 1230EST  0 0 ? 0 Coastal Surge  A mysterious surge of seawater hit several harbors a long the Maine coast at about mid-tide, suddenly raising water levels by four to six feet. Several fishing boats were damaged at their moorings. The surge traveled up the Penobscot and Orland Rivers, causing damage to a dam in Orland as ice and water overflowed it.	Washington Parish		0600CST- 0600CST		0	0	4	?	Flood
MEZO24-026-027		Caus Bog Loui flood	ed flooding along the tue Chitto River cres isiana Office of Emerg d damage in Franklinto	se rivers in 'ted at Frank ency Prepare on. The Tan	Tangipa klinton edness r gipahoa	ahoa an on the eported a River	d Wash 30th a l approx crested	nington t 17.5 f ximately l at Tick	Parishes on January 28-31. The eet, 5.5 feet above flood stage. 25 dwellings had mostly minor faw on the 29th at 23.5 feet, 5.5
A pair of low pressure systems tracking northeast along the northern New England coast deposited up to 19 inches of new snow in extreme northwestern Maine, and 6 to 12 inches across most of the remainder of the state.  MEZ024-026027  Od 1000EST- 1200EST  O 0 0 ? O High Winds  MAINE Cont'd  High winds buffeted parts of the Maine coast as dry air intruded into a coastal winter storm. Winds gusted as high as 70 mph at Cape Elizabeth and Monhegan Island. Extremely rapid pressure falls accompanied the winds. At Portland, the pressure fell eight millibars in less than half an hour.  MEZ024>029  Od 1200EST- 1230EST  O 0 ? O Coastal Surge  A mysterious surge of seawater hit several harbors a long the Maine coast at about mid-tide, suddenly raising water levels by four to six feet. Several fishing boats were damaged at their moorings. The surge traveled up the Penobscot and Orland Rivers, causing damage to a dam in Orland as ice and water overflowed it.	MAINE								
A pair of low pressure systems tracking northeast along the northern New England coast deposited up to 19 inches of new snow in extreme northwestern Maine, and 6 to 12 inches across most of the remainder of the state.  MEZ024-026027  04 1000EST- 1200EST  0 0 0 ? 0 High Winds  MAINE Cont'd  High winds buffeted parts of the Maine coast as dry air intruded into a coastal winter storm. Winds gusted as high as 70 mph at Cape Elizabeth and Monhegan Island. Extremely rapid pressure falls accompanied the winds. At Portland, the pressure fell eight millibars in less than half an hour.  MEZ024>029  04 1200EST- 1230EST  0 0 ? 0 Coastal Surge  A mysterious surge of seawater hit several harbors a long the Maine coast at about mid-tide, suddenly raising water levels by four to six feet. Several fishing boats were damaged at their moorings. The surge traveled up the Penobscot and Orland Rivers, causing damage to a dam in Orland as ice and water overflowed it.	MEZALL				0	0	?	0	Heavy Snow
MAINE Cont'd  High winds buffeted parts of the Maine coast as dry air intruded into a coastal winter storm. Winds gusted as high as 70 mph at Cape Elizabeth and Monhegan Island. Extremely rapid pressure falls accompanied the winds. At Portland, the pressure fell eight millibars in less than half an hour.  MEZ024>029  04 1200EST- 1230EST 0 0 0 ? 0 Coastal Surge  A mysterious surge of seawater hit several harbors a long the Maine coast at about mid-tide, suddenly raising water levels by four to six feet. Several fishing boats were damaged at their moorings. The surge traveled up the Penobscot and Orland Rivers, causing damage to a dam in Orland as ice and water overflowed it.		up to	o 19 inches of new sno					northe	n New England coast deposited
High winds buffeted parts of the Maine coast as dry air intruded into a coastal winter storm. Winds gusted as high as 70 mph at Cape Elizabeth and Monhegan Island. Extremely rapid pressure falls accompanied the winds. At Portland, the pressure fell eight millibars in less than half an hour.  MEZ024>029  04 1200EST- 1230EST 0 0 0 ? 0 Coastal Surge  A mysterious surge of seawater hit several harbors a long the Maine coast at about mid-tide, suddenly raising water levels by four to six feet. Several fishing boats were damaged at their moorings. The surge traveled up the Penobscot and Orland Rivers, causing damage to a dam in Orland as ice and water overflowed it.		04			0	0	?	0	High Winds
gusted as high as 70 mph at Cape Elizabeth and Monhegan Island. Extremely rapid pressure falls accompanied the winds. At Portland, the pressure fell eight millibars in less than half an hour.  MEZ024>029  04 1200EST- 1230EST 0 0 0 ? 0 Coastal Surge  A mysterious surge of seawater hit several harbors a long the Maine coast at about mid-tide, suddenly raising water levels by four to six feet. Several fishing boats were damaged at their moorings. The surge traveled up the Penobscot and Orland Rivers, causing damage to a dam in Orland as ice and water overflowed it.	MAINE Cont'd								
1230EST  0 0 ? 0 Coastal Surge  A mysterious surge of seawater hit several harbors a long the Maine coast at about mid-tide, suddenly raising water levels by four to six feet. Several fishing boats were damaged at their moorings. The surge traveled up the Penobscot and Orland Rivers, causing damage to a dam in Orland as ice and water overflowed it.		gust	ed as high as 70 mph	at Cape Eli	zabeth	and M	onhega	n Island	. Extremely rapid pressure falls
raising water levels by four to six feet. Several fishing boats were damaged at their moorings. The surge traveled up the Penobscot and Orland Rivers, causing damage to a dam in Orland as ice and water overflowed it.	MEZ024>029	04			0	0	?	0	Coastal Surge
		raisi	ng water levels by fou se traveled up the Pen	ır to six feet.	. Sever	al fishi	ng boat	s were	oast at about mid-tide, suddenly lamaged at their moorings. The
	MEZALL	07	2300EST-						

Location	Time Path Path Local/ Length Width Date Standard (Miles) (Yards)			Num Pers Killed	ber of ons Injured	Estin Dan Propert	age	January 1994	
	0.0	••••							
	08	2200EST	1	C 11	0	0	?	0	Heavy Snow
									stern sections of the state as a n antic and New England coasts.
<b>Kennebec County</b>	13	Evening			1	0	0	0	Cold
	An A	Augusta wom snow on a ba	an died of ckwoods ro	exposure oad near V	as she l assalbo	niked thoro. (F	irough t 690)	he woo	ds after her car became stuck in
MEZ016-017- 025>030	14 15	0900EST- 0100EST			0	0	?	0	Heavy Snow
	An i was	ntensifying lo responsible f	w pressure for up to te	system tra n inches o	aveling of snow	northea fall in c	ast along counties	g the ou along t	tter fringes of the Gulf of Maine the eastern Maine coast.
MEZ001>029	17 18	0800EST- 0900EST			0	0	?	0	Heavy Snow/Ice Storm
	snov Mai lines	v across north ne, a combin	ern and we ation of fronesses and	stern Main eezing raii thousands	e, with n and h s of resi	amount eavy w dents v	s decrea et snow vithout	si ng to brough electrici	ont produced 15 to 22 inches of wards the coast. Over southern at down tree branches on power ity. Roads remained ice-packed idents.
MEZ001>014	28	0100EST- 1800EST			0	0	?	0	Heavy Snow Ice Storm Urban Flood
MASSACHUSET'	12 in The prec farm cont occu	nches of snow snow evento ipitation and to buildings. I tributed to no	over weste ually chang hat of previ Downed troumerous tr	ern and nor ged over to lous winter ee brancher affic acci	thweste o sleet, r storms es on po dents a	ern Mai freezin collaps ower lin	ine, with grain, ed the nes cause road	h lesser and rain coofs or sed scat closure	Lawrence River deposited 6 to amounts elsewhere in the state.  The combined weight of this a several homes, businesses, and tered power outages. Icy roads is. Some urban street flooding rainfall and snowmelt runoff.
MAZ001>008-	04	0000EST-							
012>019	٠.	0800EST			0	0	0	0	Heavy Snow
MAZ001>024	04	0830EST- 1100EST			0	0	4	0	High Winds
MASSACHUSET	Caus This hour amo Stor 8 to	ed heavy snows "nor'easter" rs. The precunts included: neham, 11 inc. 12 inches at	w, a period caused sno ipitation the Boston, 8 ches; Word	of high wind ow accumben mixed .7 inches; eester, 10.1	nds, and ulations with or Blue H I inches	l som e s of mo r chang ill Obs s. Snov	unprece re than ed to sl ervatory wfall ov	edented one inc eet in r , Milto er west	Atlantic coast toward Cape Co d changes in barometric pressure. The per hour during the pre-daw n nany locations. Some snowfal l n, 9 inches; Brockton, 7 inches; tern Massachusetts ranged up to alley, amounts of
		nd six inches	were repor	ted. The	heavy s	now re	sulted i	n diffic	ult travel conditions and closure
	Inte baro pres gust	rnational Air metric pressur sure dropped t to 60 mph	rport, a wire fluctuation of the fluctuation of the fluctuation of the months are from the fr	and gust to on known as on the st!	o 66 m as a "gr ches) ir Wind d	iph from avity we i just ei amage	m the rave." Aght min	ortheas At Blue outes sh is even	of ski lifts. At Boston's Logan at accompanied a very unusual Hill Observatory in Milton, the ortly before 10 AM with a wind t was reported in New Bedford, stimated cost of \$50,000.
MAZ022-023-024	07	0800EST- 1800EST			0	0	0	0	Heavy Snow
MAZALL	07 08	1200EST- 0600EST			0	0	4	0	Heavy Snow

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons Injured	Estir Dan Proper	nated nage ty Crops	January 1994
	7th, and snow over temp freez quite period for a was Won Aml	and continued north of the v before preciate southeaste peratures rose de. The fast de suddenly. Rod for much of 10-day total the greatest reester, 13 in	I into the m Massachu pitation tur rn Massac to the upp rop in temp coad crews of the state. of 35 inche snow dep aches; Am- nes; E. Oti	norning of to setts Turnined to rain husetts as over 30s before atture restruggled to The Nations. In addith ever recesbury, 10 s, 15 inches	he 8th, pike. If on the far no ore fall ulted in oremo onal W tion, to orded inches es. Sev	produce even Ca evening rth as I ing quid very po ve it. The eather S tal snow so early geral day	d snow upe Coog of Jar Boston ckly bacoor roachis was bervice w depth in the ton, 7.9 after	fall total and the condition the third at Bosto on the season.	ecame heavy around noon on the ils of from 13 to 18 inches along e Islands received six inches of the Snow changed briefly to rain the morning of January 8th a see 20s and teens, causing a quick cions when snow and slush frozerd major snowstorm in a ten day on received 16.2 inches of snow ground reached 20 inches. This Other total amounts included: Westfield, 14.5 inches; Nort hrm, the roof of a supermarket in
MAZALL	15 16	1800EST- 1800EST			1	3	0	0	Cold
	Stron from Nati mini on J N. A on Ja low 4 de degr trag won	ng northwest 130 to 50 bekonal Weather imum temper anuary 16th! Amherst, -18 danuary 16th, I maximum tegrees both vees at Boston ic death can	winds according years. A Service at rature of -1 Other low legrees; Pit Boston recomperature were the legand -3 deg be attribute neighbor!	ompanied to the higher 1,000-foot 2 degrees we temperate tsfield, -16 orded its firm of only 7 owest max grees at Blated to expess doorstep.	he colost eleva high W and a v ures w degrees st belov degree imum t ue Hill osure t after he	I and dr tions, w forcester vind chi ere: Bos s; Hingh v zero r s and B empera made it o the ex er cries	ove wind child child as loston, -4 am, -6 laue Hild tures in the courtern	nd chill ls drop sipal Aii w as -6 degree degrees in more l's recon 26 yea ldest da cold in	o near-record low temperatures indices to extremely low values ped to 60 to 70 below zero. The rport recorded a record-breaking degrees shortly after daybreak s; Blue Hill, Milton, -9 degrees; and Chatham -1 degree. Also, than six years. Boston's record rd low maximum temperature of urs. The mean temperature of 2 y since January 8, 1968. A very Worcester, where a 69 year old manswered. Three people were
MAZ001-002-008- 009	17 18	0400EST- 0200EST			0	0	0	0	Heavy Snow
			ches of sn	ow fell acı					precipitation was a wintry mix.
MAZALL	18 19	1800EST- 1000EST			0	0	0	0	Cold
MAZ001>006- 008>013	19	1888EST-			0	0	0	0	Cold
	of 2		ow zero.	The extre					to 30 mph produced wind chills all day on the 19th, except in
MAZ009 Sandisfield	21	?			0	0	?	0	Flash Flood
MASSACHUSET	An i	ice jam former of the river	<ol> <li>Water 1</li> </ol>	evels rose	about	10 to 12	2 feet a	nd floo	k tree trunk perpendicular to the ded two homes. Town official s I from the river.
MAZ022 Chatham	26	0800EST- 1800EST			0	0	4	0	Ice Floes
	Stro: Bay	ng northeast v . Two 20-ft.	vinds cause boats caps	ed drifting sized and c	blocks others v	and she	ets of i t afloat	ce, caus	sing damage to boats in Pleasant fered hull or engine damage.
MAZ001>004- 008>012	27	0000EST- 1000EST	-		0	0	0	0	Cold
	drop	r, calm condi ping far belov	w zero in th	ie lõwest ai	eas. So	ome of tl	he lo we	est temp	ational cooling and temperatures beratures included: S. Amherst, and Grafton, -21 degrees. Unlike

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	nber of sons Injured	Esti Dar 1 Proper	mated nage ty Crops	January 1994
	low		nis extrem	e cold was					the entire state and included very western Massachusetts and wind
MAZ001-002-008- 009	27 28	2200EST- 1200EST			0	0	0	0	Freezing Rain
MAZALL	28	1200EST- 1900EST			0	0	0	0	Heavy Rain
MAZ005>007- 013>024	28	1200EST- 1800EST			0	0	?	0	High Winds
MAZ007 Lynn	28	1200EST- 1800EST			0	0	4	0	Ice Floes
	acro flood zero snow rain that Hud arou up to was	oss the entireding. In wester early on Januw, changed by persisted untrarea. The veson. In the earl of 60 mph. A personned 60	e state. He ern Massac ary 27th t riefly to fi il noon on veight of s eastern par at the Natio uph, while a 878 mph in	eavy rainfa chusetts, tendo 45 to 50 reezing rain the 28th. snow and introfer the stand onal Weath at the Blue the late aft	all and an apperatured degree in, then A coat ce causalte, sou apperatured Hill Otternoon	melting res ros s by the to all r ing of sed the th wing rice For bservat	g snow e 80 de e aftern rain, exc glaze uj collaps ds were recast ( cory in l	combingrees in oon on cept in lep to one see of a sustair Office in Milton,	r and much warmer temperatures and to produce widespread stree to a about 30 hours: from 30 below the 28th! Precipitation began as Berkshire County where freezing e-half inch thick was observed in roof at a commercial building in the at 30 to 40 mph with gusts to a Taunton, winds were estimated elevation 670 feet, the peak gust aused an estimated \$20 thousand
MICHIGAN									
MIZ023-024-029-030 Northeast Lower	01 01	0000EST 1900EST			0	0	0	0	Heavy Snow
	quic Lake from snow were nort Cha Cour	kly northeaste Huron by 1 h around mid w fell from 07/e around six hwest Alcontham. Snownties. Genera	across the solution of the sol	e Straits of Saturday. I I noon on S til 1900 ES n southern s. The ma ive to six amounts ov	f Macki Lake en Saturda ST Satu Mon ximum inches ver lowe	inac by hance y, while rday. tmoren snowf were er, centr	dearly described and snow le over The macy, sou call in the commo ral and	Saturda fell oven northwe eximum thwest ne Uppe n acros eastern	T Saturday. This system move dry afternoon and was northeast of er the Michigan Upper Peninsula est Lower Michigan, most of the snowfalls over Lower Michigan Alpena, northeast Oscoda, and er Peninsula was seven inches at ss Baraga, Marquette and Alger Upper Michigan were in the two ems in any part of Michigan.
MIZ005 Central Upper Michigan	04 05	1600EST 0800EST			0	0	0	0	Heavy Snow
MICHIGAN Cont	up to	e effect snow ten inches i	fell from n Skandia	late Tuesda , which is	ay after in easte	rnoon u ern Mai	intil mi rquette	d morni County	ing Wednesday. This resulted in . Most of the rest of Upper
	six ii Trav	nch amounts f	fell over pa a, Antrim	ırts of Chip and Charlev	pewa ( voix Co	County	in east	ern Upr	three to six inches of snow. The per Michigan, and parts of Grand Lower Michigan and Presque Isle
MIZ000>083 All of Michigan	05 08	2000EST 2000EST		-	0	0	6	?	Heavy Snow

Low pressure tracked east across the upper Ohio valley on the 6th causing widespread snow across Michigan. After this low passed east of Michigan, late in the day on the 6th, a surface troug h remained across the central Great Lakes with an easterly flow across northern Lake Michigan, northern Lake Huron and all of Lake Superior. The trough and the cold flow of air over the Great Lakes prolonged snowfall over northern Lower Michigan and Upper Michigan until the 8th. The hardest hit area was the Keweenaw Peninsula of Upper Michigan where up to three feet of snow fell. Around one to two feet of snow fell across central Upper Michigan, extreme northwest Lowe r

Time Path Path Number of Estimated Damage Damage Uccation Date Standard (Miles) (Vards) Killed Injured Property Crops Character of Storm

Michigan, and east-central Lower Michigan. The rest of the state had about 6 to 12 inches, and most of that fell on the 6th. Over the southern half of Lower Michigan, the heaviest snowfall was over the extreme southeast where 9 to 11 inches fell on Washtenaw, Wayne, Hillsdale, Lenawee and Monroe Counties. Hillsdale was the hardest hit with 11 inches of snow. For those counties, this was the heaviest snowfall since the January 13, 1992 snowstorm. In that storm, up to 14 inches of snow fell over the same area. The remainder of east central Lower Michigan had six to eight inches. Strong easterly winds of 15 to 25 mph with gusts around 35 mph, caused considerable blowing and drifting snow. Snow drifts of three to five feet were common. There were seven deaths indirectly related to the storm. Waldermar F. Fireammer, 73 of Niles, died about 1500 EST, Thursday, January 6th from a heart attack while shoveling snow. The other six deaths were from traffic accidents. In the Flint area, Sarah Coats, 91 and her daughter, Patricia A. Fogel, 60, died when a car on the other side of the highway loss control crossed the median and crossed the crossed the median and crossed the crossed of the highway loss control, crossed the median, and crashed head-on into the car they were in. Their car was being driven by the son-in-law of Sarah Coats. The drivers of both cars were also injured in the crash. The fourth death occurred Friday evening, on the service drive of the Lodge Freeway, in downtown Detroit. A trash-hauling truck slid out of control, smashing into a car with a family of four in it. All four were killed in the accident. The storm caused hundreds of minor accidents, mostly fender benders, and cars or trucks sliding off the roads they were driving on. Also, several multi-car pile ups were also reported. Road crews in many areas of the state could barely keep up with the combination of snow and blowing and drifting snow. Many road side restaurants had little or no customers, even during the dinner hour, mostly on Thursday. Most schools were canceled near Lake Huron, and over the southern half of Lower Mic higan, both Thursday and Friday. Surprisingly, even though many of the inland counties had more snowfall, schools were not canceled there. Besides the traffic and other related problems, Detroit Edison set an all time daily winter record for power usage on Thursday, January 6th, with 6,832,000 kilowatts of power used. This broke the previous record, set on December 13, 1993, by about 20,000 kilowatts. Considering that the heaviest snowfall was over central Upper and central Lower Michigan, it is worth noting that the area having the greatest impact to the general population was the extreme eastern and southern parts of Lower Michigan. The cost of snow removal for this storm alone was estimated at over a millon dollars!

MIZ001>004-006> 12 009-014-016-019> 21 022-024-025>027-031>033-037-038-043-049-050-056-064-071-077-078 Upper Michigan Near Lake Superior, Central Upper, Northwest, West and Southwest Lower plus Thumb area of Lower Michigan Lak 0000EST-0700EST 0 0 5 ? Heavy Lake Snow

Lake effect snow fell almost continuously through this entire period over western Lower Michigan and Upper Michigan near Lake Superior. Parts of northwest Lower Michigan received 5 to 10 inches almost every day through the event. All of the counties directly adjacent to Lake Michigan had total snowfalls for the entire period of two to four feet. Parts of the Leelanau Peninsula received around 50 inches of snow! Over Upper Michigan, one to two feet fell in the counties adjacent to Lake Superior. Strong north winds on the 17th and 18th caused Schoolcraft County to

#### MICHIGAN Cont'd

get as much as 15 inches. A weak frontal system crossed the Great Lakes on the 16th and 17th. This brought three to six inches to most of the rest of Michigan. Behind this system some of the coldest air on record resulted in temperatures across the state to stay below or near zero from the 16th through the 20th. Strong winds combined with the very cold temperatures to cause wind chills to around 70 below zero. Beside the very low wind chills the strong winds caused incredible sno w drifts near Lake Superior and Lake Michigan. Many areas became almost unaccessible except by snowmobile. In southwest Lower Michigan, part of the eastbound lane of Interstate-94 in Berrien County was closed on the morning of the 14th, due to numerous traffic accidents. Up to five tractor-semitrailers at one time were involved in some of the accidents. In one case, a fuel truck leake d when one of its tanks "popped open." Numerous other traffic accidents, related to slippery roads and poor visibility, were reported across the area. The highest concentration of problems was from Muskegon south to the state line. No airports in the area closed but many flights were delayed for hours, mostly on the 17th, due to the heavy snow, very strong winds, and the resulting blowing and drifting snow. The extreme cold during this time was of no help either. Two building had their roofs collapse during this event. Both were in the Grand Rapids area. The West Michigan Flockin g building in Fennville had 6000 feet of its roof collapse during the night Monday, January 17th. A few people were in the factory but no one was injured when the roof gave way under the weight of

Time Path Path Number of Estimated January 1994
Location Date Standard (Miles) (Vards) Filled Injured Property Crops Character of Storm

snow drifts that had piled up on a corner of the roof. The damage was estimated around 100,000. A vacant building in Hudsonville collapsed on Thursday the 20th, due to the weight of the accumulated snow. The building was about as big as a medium pole barn.

MIZ000>083 ALL of Michigan 13 0000EST 20 1200EST

0 0 7 ? Record Cold

An arctic air mass of historic proportions settled over the state of Michigan from the 13th to 20th of January. Low temperatures on the morning of the 19th reached near all-time record low levels nearly statewide as readings of 20 to 40 below zero were quite common. Numerous daytime, and monthly record lows, were broken as well as numerous daytime record low maximum temperatures. The alltime record low for the state of Michigan was also challenged on January 19th with Amasa, Michigan coming in with a remarkably low temperature of -53 F surpassing the old record of -51 F. Unfortunately, this reading can not become an official state record low since the thermometer site was too close to the observer's house! At Detroit, this is the second longest stretch of below zero temperatures in its recorded weather history. The temperature was below zero for 57 consecutive hours, from 0100 EST on the 18th through 1000 EST on the 20th! Detroit set many other records, not the least of which was the lowest high temperature ever recorded at Detroit with a high on the 19th of 4 below zero. The previous record was 3 below zero on the 9th of February in 1899! The low temperature of 20 below for the same day was the third coldest temperature ever recorded a t Detroit. So, the combination of the high and low temperatures give a mean temperature of 12 below zero, that made the 19th of January, 1994 the coldest day in Detroit weather history! If you think that is cold, consider that Marquette set a record for the longest period of consecutive hours below zero for their entire period of record. At Marquette, the temperature fell below zero at 1400 EST on Thursday, January 13th, then did not rise above zero until 1100 EST on Thursday, January 20th. That is 167 consecutive hours or about seven days continuously below zero! The lowest temperature during that time at Marquette was 27 below zero on the 19th. Sault Ste Marie fell to 29 below on the 15th, that was the coldest official temperature at any major city in the state during this cold spell. Flint tied the record cold average temperature of 4 below on the 14th. On the 16th, the average for the day of 4 below zero set another record cold average temperature. On the 18th, the high of 4 below and the average of 11 below were records for Flint. On the 19th, Flint's high of 3 below, the low of 21 below and the average of 12 below were all records for the day. Lansing was continuously below zero for 63 consecutive hours from the 17th at 1900 EST until the 20th at 1000 EST. At Lansing record low maximums were set on the 18th at 1 below and the 19th at 2 below zero. Grand Rapids' high of 3 below zero on the 19th was a record for that date and tied the record lowest high for the month of January. At Alpena, the low of 28 below zero on the 19th was the coldest for that date, and tied the record low for the month of January. The combination of strong winds at times with the snow and record cold temperatures combined to cause numerous problems across the state. Hundreds of schools were closed for several days in a row in many areas of the state. This was because the very low wind chills made waiting for the school bus too dangerous in most areas of the state. On Wednesday the 19th alone, over 300 schools across the state were closed. Michigan State University closed on the 19th. This was only the fourth time in Michigan State University's history it closed due to weather. Detroit Edison, after just having set a record of daily power usage on the 6th of January, set another record on the 18th, with

#### MICHIGAN Cont'd

7,237,000 kilowatts. The cold weather caused power lines to snap resulting in brief outages. This made the problem of frozen water pipes in many areas even worse. Many areas, especially in the Upper Peninsula, had whole towns with frozen water pipes for over a week. In many cases busting water pipes caused damage in many homes and businesses across the state. Damage just from the frozen water pipes in the Upper Peninsula alone is estimated at over \$2 million! Added to that is the cost of repairing downed power lines, lost school and work days, replacing damaged engine parts due to the extreme cold. Total damage costs easily exceed \$5 million for the entire state! Man y hospitals reported numerous cases of frozen lungs and frost bite. All in all, the arctic outbreak of January 1994 will not be soon forgotten.

MIZ005-006-009- 27 0000EST 0016>083 29 0300EST 0 0 0 6 ?
Part of Upper and All of Lower Michigan

Snow developed over southwest Lower Michigan just after Midnight on the 27th. This snow area

**Heavy Snow** 

Freezing Rain

		Time Local/	Path Length	Path Width	Number of Persons	Estimated Damage	January 1994
Location	Data	Standard	(Miles)	(Varde)	Killed Injured	Property Crops	Character of Storm

spread rapidly northeast. By 0700 EST on the 27th, the snow area had merged with a lake induced show area over northeast Lower Michigan, resulting in snowfall over all of Lower Michigan by that time. By 0400 to 0500 EST on the 27th, over the southern third of Lower Michigan, the snow mixed with, then changed to, sleet and freezing rain. The area of freezing rain then raced northward across the rest of Lower Michigan. By late afternoon on the 27th, most of Lower Michigan had freezing rain or sleet. The freezing rain changed to rain over the southern third of Lower Michigan by mid afternoon. After 1900 EST on the 27th, freezing rain continued north of a South Haven to Flint line, while rain continued, heavy at times, south of that line. Overnight on the 27th and into the morning hours of the 28th, occasional rain continued over the southern half of Lower Michigan while occasional freezing rain continued over the north half of Lower Michigan. By the morning hours of the 28th, snow developed over Upper Michigan. During the rest of the 28th, the area of freezing rain changed to snow across Lower Michigan. Over central and northern Lower Michigan the snow became heavy by mid afternoon. The snow, heavy at times, continued until around 2300 EST on the 28th over the Lower Peninsula, and until around 300 EST on the 29th over the Light continued to the 28th over the Lower Peninsula. Light snow continued over most of northern Lower and Upper Michigan until mid afternoon on the 29th, but little additional accumulations occurred. Snowfalls of six to eight inches were common over the north half of Lower Michigan. Parts of western Iosco County had up to 14 inches. Over the Upper Peninsula, snowfall of three to five inches were common. However, parts of Marquette and western Alger County had 10 to 12 inches of snow. Western Gogebic County had eight inches. As for ice accumulations over Lower Michigan during the freezing rain, around a quarter inch accumulated over the south third of lower Michigan, from 0.50 to 0.80 inches accumulated over central and northeast Lower Michigan and one to three tenths of an inch accumulated over northwest sections of Lower Michigan. This resulted in numerous outages. Detroit Edison reported 50,00 0 people affected by power outages. Consumers Power County reported 2,000 customers withou t power. Most of the power loss problems were over the southeastern part of Michigan even though this was not the area of heaviest ice accumulation or of the strongest winds. Most of the power loss occurred on Thursday, January 27th, during the ice accumulation phase of the storm. More than 150 schools canceled classes across the state. Hope College, in Holland (near Grand Rapids), called off classes and many of Grand Rapids area malls were closed on Friday, the 28th. The Kent Count y Airport, which services the Grand Rapids area, was closed for five hours on the morning of the 27th (Thursday), due to icy runways. Over the southeast part of Lower Michigan, in the Detroit area, there were tales of man-eating potholes. The potholes were so big and so numerous that dozens of cars were stranded along Interstate 75 in the Detroit area after be coming disabled from hitting the potholes, and as a result, blocking the Interstate. Two students were killed Thursday evening, in the Midland area of east-central Michigan, when their cars crashed into to each other. Dead are Laura Martin, 18 of Sterling Heights and David Gonzalez, 20 from Shelby Township. Laura's car skidded out of control on icy Michigan Highway-20 near Currie Parkway and smashed broadside into David's car. Across the rest of Michigan, there were numerous reports of cars skidding off the road and mino r fender-bender type accidents.

#### **MINNESOTA**

MNZ003-012-019> 021-027-038-041 >045-050>053-061>063-070-078-Central to Northeast Minnesota 05 1100CST-07 1900CST

0 0 ? 0 Heavy Snow

A low pressure system traveled from the Dakotas, across southern Minnesota and to the Great Lakes region, from the late morning on the 5th, through the early evening on the 7th. As the low traveled toward the Great Lakes, an east wind developed along the North Shore of Lake Superior and caused lake effect snow.

By the early evening hours on the 7th, up to three and one-half feet of snow had fell along the higher terrain area near Lake Superior. Finland (Lake County) reported a total of 44 inches and Tw o Harbors (Lake County) reported about 20 inches. The storm also produced heavy snow across parts of central Minnesota. Amounts of six inches or more occurred south of a line from Detroit Lakes (Becker County), to Floodwood (St. Louis County), to near I sabella (Lake County) and north of a line from Fergus Falls (Ottertail County), to Elk River (Sherburne Co unty), the Twin Cities and Red Wing (Goodhue County).

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Pers Killed	nber of sons Injured	Estir Dan Proper	nated nage ty Crops	January 1994
	Man a nu	y schools were mber of comr	e closed be nunity eve	ecause of the	ne heavy	y snow d becau	accum	ulation. ne incle	Several accidents occurred and ment weather.
MNZ001>098- All of	15 20	0100CST- 2300CST			1	?	?	0	Extreme Cold
Minnesota	perio belo mark chill mov	od of record or w to 40 below to 40 below to As the air not readings from the state over the state of the sta	near record v zero acro nass appro equently intate on the	rd cold across the state the the following t	oss Mi te with area, a elow to low ten	nnesota daytin biting r 80 bel nperatu	i. Low ne high north w low zer re of 45	temper temper ind acc o range below	ern Canada causing an extende d atures ranged anywhere from 20 ratures remaining below the zero ompanied the cold causing wind the core of the cold air mas s zero was reported at Tower (St. of 47 below zero.
	Mini cold in H Acc pave	nesota at both  Many busine allock (Kittson idents were c	the Twin ( esses were n County) ommon a g extreme!	Cities and I closed or correct froze, lear cross mostly icy road	Duluth closed e wing mote of Milways.	campus arly thr ost of the nnesota One de	ses wer roughou ne city a a as car eath wa	e also c it the co and the exhaus is attrib	on the 18th. The University of losed on the 18th because of the old wave. The city water system surrounding area without water. It froze on contact with the cold uted to the cold. A 69 year old rs. (F69O)
MNZ039-046-054 -064-071-073- 076-077-080- 083>085-089- 091>094-097-	26 27	2000CST- 2100CST			0	0	?	0	Heavy Snow
West-Central to South- Central Minnesota	Snow to T	27th. Near trstate 90 was ed or were car wfall amounts racy (Lyon 0	olizzard consisted for colored become of six includingly, Vand Aus	onditions of a time. cause of the hes or more Worthington (Mowe	levelop Many he weath re fell son (Not r Coun	ed over schools her. outh of oles Co ty). Th	r much s, area l a line f unty), l e heavi	of sout business From Br Blue Ea iest sno	ing of the 26th to the evening of hern Minnesota and a stretch of ses and community events wer e owns Valley (Traverse County), irth (Faribault County), Wasec a wfall reported was ten inches at
MISSISSIPPI									
Pike County Summit	<b>17</b> A tro	0735CST	down on	a mobile l	0 nome.	0	3	0	Thunderstorm Winds
Forrest County Hattiesburg	<b>17</b> Nun	0935CST	vere blowi	n down bei	0 tween I	<b>0</b> interstat	<b>3</b> te 59 an	<b>0</b> id High	Thunderstorm Winds way 49.
Warren County Eagle Lake	27	0025CST w trees were			0	0	2	0	Thunderstorm Winds
Humphreys County Belzoni		0700CST	a husiness	was blow	0	0 Δ few s	4	0 ere desi	Thunderstorm Winds troyed. Several trees and power
Adams County	lines	s were blown	down. A	few small	storage	buildir	igs wer	e blowi	1 over.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons	Esti Dai	mated nage	January 1994
Natchez	27	0900CST	,	,	0	0	5	0	Flash Flood
	Fift	een homes ha	d water in	them. Mu	ud slide	es caus	ed seve	ral trees	to fall down.
Lincoln County Brookhaven	27	1100CST	cı	1 1 111	0	0	3	. 0	Flash Flood
T	Nur	nerous streets	were floo	oded. Wat	er got 1	nto sev	eral bu	sinesses	·
Forrest County Hattiesburg	27	1128CST			0	0	0	0	Hail (0.75)
Amite, Pike, and Walthall Counties	27 27	1130CST- 1400CST			0	0	3	0	Flash Flood
Walthan Counties		nerous roads	and street	s were floo	-		_	-	
Marion County	T (GI	incrous rougs	ana street	o were mod	aca ac	1000 111	e unee .	county (	arcu.
Foxworth	27 27	1130CST- 1330CST			0	0	0	0	Flash Flood
	Hig	hway 35 near	Foxworth	had to be	closed	due to	six to s	even in	ches of water over the highway.
Adams County	27 27	1630CST- 1900CST			0	0	5	0	Flash Flood
	Fifte dow	een homes wer n. Three brid	re flooded. dges were	Mud slide closed due	es along e to hig	the Mi h wate	issi ssip <sub>l</sub> r. Ten 1	oi in Na roads w	tchez caused several trees to fall ere damaged.
Pike County	27	1630CST- 1900CST			0	0	5	0	Flash Flood
	Ten	bridges and f	forty road	s were clos	se due t	o heav	y rain a	nd flood	ling.
<b>Amite County</b>	27	1630CST- 1900CST			0	0	5	0	Flash Flood
		o bridges we oughout the co		l out. Ove	r forty	roads l	nad to b	e barric	aded and closed due to floodin g
Franklin County	27 27	1630CST- 1900CST			0	0	5	0	Flash Flood
	Fou	r bridges were	washed o	ut and man	y roads	throug	shout th	e count	y were damaged due to flooding.
<b>Lawrence County</b>	27 27	1630CST- 1900CST			0	0	5	0	Flash Flood
MISSISSIPPI Con	nt'd								
	Floo	oding caused	damaged	to numerou	ıs road:	s and b	ridges t	hrough	out the county.
Lincoln County Brookhaven	27 27	1630CST- 1830CST			0	0	4	0	Flash Flood
	Nun	nerous streets	were close	d due to flo	oding.	Some r	ninor da	mage v	vas done to a couple of bridges.
<b>Marion County</b>	27 27	1630CST- 1900CST			0	0	5	0	Flash Flood
	Ten and	homes had mi bridges were	inor damaş flooded a	ge due to flo nd caused	ooding. some r	Two b	u siness lamage.	ses had	minor damage. Numerous roads
Walthall County	27 27	1630CST- 1900CST			0	0	4	0	Flood/Flash Flood
	Nur of tl	nerous roads he county floo	and low 1 oded. Seve	ying areas eral roads v	were fl were da	looded maged	when I	Bogue C	Chitto Creek in southwest section
Wilkinson County	27	1700CST			0	0	3	0	<b>Thunderstorm Winds</b>
	Nur	nerous trees v	vere blow	n down to	the sou	theast	and nor	th of W	oodville.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Per	nber of sons Injured	Estii Dar Proper	nated nage ty Crops	January 1994
Amite County 2 N Gloster	27 Eigh		our mobi	le homes	<b>0</b> were d	<b>0</b> amaged.	5 Num	0 erous tr	Thunderstorm Winds ees and power lines were blown
<b>Lincoln County</b>	27	1730CST- 1800CST			0	0	5	0	Thunderstorm Winds Hail (2.75)
	Linc of cl	coln to five mile	es northea were dest	st of Broo	okhavei	n. Severa	al thou	sand tre	cross Lincoln County from West ses were blown down. A couple 100 mph. Baseball-size hail fell
Warren County Vicksburg	27	1730CST			0	0	5	0	Flash Flood
		ee homes in He ets were floode				aged wh	en wa	ter knee	deep got into them. Numerous
Lincoln County 5 SW to 2 E of Brookhaven	27	1740CST	6.0	40	0	7	5	0	Tornado (F2)
	Sev was	eral mobile ho	mes were ed. Seven	totally de	estrove	d. One f	rame l	iouse w	nct path of convergent damage. as totally destroyed. A sawmill es. Many trees and power poles
Lawrence County 8 SE Monticello	27	1755CST	1.0	50	0	0	4	0	Tornado (F0)
	Two	o mobile home	s were da	maged an	d one b	arn dest	royed.	Severa	al trees were blown down.
Marion County Goss	27	1805CST			0	0	5	0	Thunderstorm Winds
	Nun	nerous trees w	ere blowr	down an	d sever	al house	s were	damag	ed.
Jefferson Davis Coun	ty								
2 N Bassfield - 1 NW Deen	27	1807CST	4.0	100	0	0	5	0	Tornado (F1)
MISSISSIPPI Con	Sev num	erous trees we	re blown	down, and	d one 8	600 poui	nd hors	se traile	uple of campers were damaged, r was blown over and moved 15 nds was heavily damaged.
Rankin County Brandon	27	1825CST			0	0	0	0	Flash Flood
	Nun	nerous streets	were floo	ded. Wat	er topp	ed a dan	ı in a s	ubdivis	ion.
<b>Simpson County</b>	27	1830CST			0	0	3	0	Flood/Flash Flood
	The	Strong River	Near D'L	went abo	ove flo	od stage	and ca	used m	inor damage to a water park.
Covington County 2 W Seminary	27	1840CST			0	0	4	0	Thunderstorm Winds
	Nun A co	nerous trees an ouple of house	d power l s had mir	ines were or damag	blown e.	down, ii	ncludir	ng a hig	h voltage line near Highway 49.
Jones County Laurel	27	1846CST	2.0	100	0	0	6	0	Tornado (F1)
	Thir maj	ty-three houses	were dan	naged in no ses had m	orthwes	st Laurel amage. I	. Two	houses	were destroyed, 12 houses had ss were damaged. Much of the

		Time Local/	Path Length (Miles)	Path Width	Pers	nber of	Esti: Dar	mated nage	January 1994
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Proper	ty Crops	Character of Storm
Forrest County Maybank	27	1910CST			0	0	2	0	Thunderstorm Winds
	Sev	eral trees we	re blown d	lown.					
Pearl River County 2 N Poplarville	27	1940CST			0	0	2	0	Thunderstorm Winds
	Sev	eral trees we	re blown d	lown.					
Stone County Perkinston	27	1945CST			0	0	2	0	Thunderstorm Winds
	Sev	eral trees wer	re blown d	lown.					
Clarke County Enterprise	27	1955CST			0	0	2	0	Thunderstorm Winds
	Thre	ee trees were	blown do	wn.					
<b>Lauderdale County</b>	27	2000CST			0	0	2	0	Thunderstorm Winds
		nerous large li he county.	imbs, three	to four inc	hes in	diamete	er, were	blown	out of trees in the southeast part
Lauderdale County Meridian	27	2030CST			0	0	2	0	Flash Flood
Meridian			ne across tl	ae city wer	-		_		ked down a retaining wall.
MICCOLIDI	1 W C	only-live alea	is actoss ii	ie city wei	e moou	cu. A i	muusmu	ie knoci	ked down a retaining wan.
MISSOURI		*400 GGF							
MOZ005>010- 015>019- 023>027-032>035- 040>042-046>052- 057>065-070>076- 082>087- Northeast, Central,	14 20	2100CST- 1300CST			0	15	6	0	Extreme Cold
and East-Central Missouri	20th drop	with several	days of ter	nperatures	in the si	ngle di	gits or l	below z	ri from January 14th through the ero. Overnight lows on the 18th a, -8 at St Louis, and -10 at Cape
MISSOURI Cont'	caus time	sed water dam	nage. The -50, kept s	combination chools clos	on of te sed for s	mperat ev eral	ures and days as	d dange well. 1	r pipes, some of which burst and rously low wind chills, which at About 15 people were reportedly
		asional snow even inches o		on the 16	th also	caused	proble	ms with	the St Louis area receiving four
MOZ085>087- 097>100-106>115-	16 17	1000CST- 0600CST			0	0	6	0	Winter Storm
Southeast Missouri	10 in dam and	nches of snov nage to older	w. Numer barns and number o	ous trees a collapsed of car accid	nd pow roofs w	er lines ere als	s fell do o repor	wn due ted due	heast Missouri, followed by 6 to to ice accumulation. Structural to the heavy weight of the snow rea highways. Some areas wer e
Worth County, Harrison County	26 27	1430CST- 1200CST			0	0	4	0	Ice Storm
	Free	ezing rain for	rn Harrisor	n Counties.	eriod pr Power	roduced lines v	l signif vere kn	icant ic	e accumulation over sections of lown leaving many communities

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nur Per Killed	nber of sons	Da	mated mage	January 1994	
			,	, ,		3	•	, ,		
MONTANA										
Lewis and Clark Cou Helena	Ŏ4	2030MST			0	0	0	0	Thunderstorm Winds	
	The a tra	roof was blov insmission lii	vn off the o ne was blo	city mainte wn down.	nance s	h op and	d electr	ic powe	er was lost on the west side when	
MTZ006	17	0500MST- 1700MST			0	0	0	0	Heavy Snow	
	Five	e inches of sn	ow fell at	Lewistow	n durin	g the da	ay.			
MTZ005	18 19	2000MST- 0800MST			0	0	0	0	Heavy Snow	
	Five	e inches of sn	ow fell at	Havre.						
NEBRASKA										
NEZ043 Loup River	11- 14	?			0	0	0	0	Flood	
	An	ice blockage	around Ge	enoa cause	d mino	r overfl	lows on	to lowl	ands, which then froze in place.	
NEZ046-047- 057>061-069>074- 079>082	26	0100CST- 2300CST			0	0	0	0	Heavy Snow	
Southwest, South- Central Nebraska	Hea to te	vy snow fell a en inch range	cross parts . Benklen	of southe	rn Neb ed 14 ir	raska d iches ai	uring th nd Impe	ne day. erial rep	Most amounts were in the seven orted 11 inches.	
NEZ066-077-078- 087>090 Southeast Nebraska	26 27	0500CST- 0100CST			0	0	4	0	Ice Storm	
	Free	zing rain and	sleet cause	ed icing of	trees ar	nd powe	er lines.	Some	electrical outages also occurred.	
NEZ007-010>012- 016-017-027>031-	26 27	1800CST- 1200CST			0	0	0	0	Heavy Snow	
039>041	Hea betv	vy snow fell veen Norfolk	l across pa , O'Neill a	arts of nor and Ord.	thern N	lebrask	a. Amo	ounts w	ere generally six to eight inche s	
NEVADA										
Washoe County Reno	04	2105PST			0	0	0	0	High Winds	
	A w	ind gust of 7	2 mph was	s reported	in sout	h Reno				
Douglas County Gardnerville	23 A w	1146PST rind gust of 6	3 mph wa	s reported	0 in Gard	<b>0</b> Inervill	<b>0</b>	0	High Winds	
Mineral County 6 N Hawthorne	24	1230PST	Ι		0	0	?	0	High Winds	
	Hig! Uni	h winds over ted States Hig	turned a tr ghway 95,	actor-semi six miles	itrailer north c	on a wi of Hawt	nd proi	ne streto	ch of	
Humbolt County 23 E Winnemucca	25	1530PST			0	0	0	0	Heavy Snow	
Lander County Austin	25	1530PST			0	0	0	0	Heavy Snow	
	A w Win	inter storm d inemucca. It	ropped eig also dropp	ght inches ped 14 inc	of snow hes of s	v in 12 snow in	hours i 24 hou	n Pump ırs in A	ernickel Valley, 23 miles east of	

#### **NEW HAMPSHIRE**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Perso Killed	per of ons Injured	Dan	nated nage y Crops	January 1994
NHZALL	04 05	0200EST- 0200EST			0	0	?	0	Heavy Snow
		wfall of 6 to 13 heast along th					shire a	s a pair	of low pressure systems moved
NHZ011-014	04	1030EST- 1130EST			0	0	?	0	High Winds
	trees	n winds hit sou s were uproo orted at the Islo	ted in Jaff	rey with th	e as dr ne onse	y air in et of the	truded e high	into a co winds.	oastal winter storm. At least 30 Wind gusts up to 71 mph wer e
NHZALL	07 08	1800EST- 1600EST			0	0	?	0	Heavy Snow
	Fror track	n 6 to 15 inc ked northeast	hes of sno	ow fell acro d- Atlantic	oss Nev and No	w Ham ew Eng	pshire gland co	as an in oasts.	tensifying low pressure syste m
<b>Coos County</b>	15	Evening			1	1	0	0	Extreme Cold
	frost Tem	tbite as he h	niked four om -30 F	additiona to -40 F a	ıl mile	s to t	he obs	ervatory	d cold. His companion suffered on top of Mt. Washington. mph were producing windchill
NHZALL	17 18	0600EST- 0500EST			0	0	?	0	Heavy Snow Ice Storm
	snow com powe	v across north bined with he	ern and ce eavy, wet g off electr	ntral New snow over icity to nea	Hamps southe arly 75,	shire, w ern Nev ,000 re	vith less w Hamp sidents	ser amor oshire, t and ma	produced one to two feet of new unts in the south. Freezing rain oringing down tree branches on ny businesses. Roads remained ile accidents.
NHZ001>004	28	0000EST- 1500EST			0	0	?	0	Heavy Snow Ice Storm Urban Flood

#### **NEW HAMSPHIRE Cont'd**

An intensifying low pressure system moving northeast along the St. Lawrence River deposited six to eight inches of snow over northern and central New Hampshire, with lesser amounts over southern sections. The snow eventually changed over to sleet, freezing rain, and rain. The combined weight of this precipitation and that of previous winter storms collapsed the roofs on several homes, businesses, and farm buildings. Downed tree branches on power lines caused scattered power outages. Icy roads contributed to numerous traffic accidents and some road closures. Some urban street flooding occurred as ice-clogged storm drains prevented proper drainage of rainfall and snowmelt runoff.

#### **NEW JERSEY, Northern**

NJZ001-002-004- 007>010 Northwest New Jersey	04	0700EST	0	0	?	0	Snow/Ice Storm
NJZ012>014 Middlesex and Monmouth County	04 04	1000EST- 1600EST	0	0	?	0	Coastal Flood

A strong low pressure system moving along the coast generated a variety of winter weather and major problems for residents. A dangerous mixture of snow, sleet and freezing rain fell across the area. Over the colder interior sections the snow and ice accumulated between three and six inches with local amounts of eight inches. Although the coast escaped the higher amounts of snow and ice, they had plenty of other problems. High winds downed numer ous trees and power lines, some made more

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estin Dar Proper	nated nage	January 1994
	the o		rose between	en three a					ow caused water to pile-up along ad this lead to significant coastal
NJZ001>005-007- 008	07	2200EST			0	0	?	0	Snow/Ice Storm
Northwest and Northeast New Jersey	durii to ric start rain. of re	ng the afterno de over colder ed as snow ar Power lines	on and nigh r air at the s nd accumula and large b	it. A warm urface. The ited betwee ranches we	front e is gener en four a ere dow	extendirated a vand eig and eig and du	ng east win tery ht inch	ward from mix of es beforgnifican	moved northeast and develope d om this low, allowed warmer air precipitation. The precipitation re changing to sleet and freezing t ice accumulations. Thousands ghout the area was significantly
NJZ001>005-007- 008	12	1800EST			0	0	?	0	Snow/Ice Storm
Northwest and Northeast New Jersey	of pr	recipitation ov	ver the regional of the vertical distribution	on. Snowfa the snow	ıll total chang	s range ed to s	d betw	een four	waters deposited a wintery mix r and eight inches. A dangerous ng rain before ending. Traffi c
NJZ001-002-007- 008	17	2100EST			0	0	?	0	Heavy Snow
Northwest New Jersey	ever enou Accu repo were	ning hours. ' ugh through umulations ra rted. This br	This was for the perious singed betwought traffi	ollowed by d across een 6 and ic to a stan	y a colo the into 12 inch dstill th	d front erior thes how aroughous	fater the hat the vever so out the	nat nigh form ome isol area. Ir	front into the region during the t. Temperatures remained cold of precipitation was all snow. lated amounts of 17 inches were a addition, trees and power lines knocked power off to thousands
NEW JERSEY, N	orth	ern Cont'd	l						
NJZ001-002-007- 008 Northwest New Jersey	28	0300EST			0	0	?	0	Snow/Ice Storm
NJZ001>014 Northern New Jersey	28 28	0800EST- 2100EST			0	0	?	0	Urban Flood

Snow falling ahead of a warm front approaching from the south, accumulated between three and six inches before changing over to sleet and freezing rain. The change led to a dangerous coating of ice on the roadways which in turn brought traffic to a standstill in many locations. It also downed numerous power lines leaving many residents without electricity during the night. The passage of the warm front during the early morning caused temperatures to soar into the 40s and 50s throughout the area. The combination of these warm temperatures melting the snow and the arrival of heav y rains caused significant and wides pread urban flooding across the area. Many roads were closed for hours during this event. Numerous cars stalled out attempting to cross some of these flooded roads. Several of these motorist had to be rescued from their vehicles. In addition, the lower Raritan and Millstone rivers in Somerset county experienced significant flooding due to the rain, snow melt and ice jams. Many of the streams that feed these rivers also experienced significant flooding.

0

0

Flood/Flash Flood

28 29

NJZ010

**Somerset County** 

1400EST-

1200EST

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons	Esti: Dar 1 Proper	mated nage ty Crops	January 1994
NEW MENTO									
NEW MEXICO Bernalillo County Albuquerque	25	1818MST			0	0	4	0	Thunderstorm Winds (G47)
	thur Albo of th to 50 and Albo	nderstorms a uquerque. The ne brick build 00 customers Gibson Bo	round the aree-quarter ding also cantered ar ulevards sanother 10	city. The cors of the roaved in. To ound the aroutheast.	quick-h oof of the he stor ea of B One h ast Mo	itting s he Road m also roadwa nundred untains	torm prodrunner knocke y Boule loutage. Wind	roduced Food B d down vard a n es were	er of recent weeks and produced damage, especially in souther n bank was ripped off and one side trees and caused power outages d Interstate 25, north of Stadium e scattered through the rest of d to 47 knots (54 mph) nearby at
NMZ002-004	25 26	1900MST 0630MST	-		0	0	0	0	Heavy Snow
	a rat	orm system b her long dry p er. 10 inches	period with	Angel Fire	receiv	ing 14 i	nche s, I	10 inche	as. The ski areas benefitted from es at Ski Rio and 7 inches at Red e.
NMZ016-017, 024- 029, 031	28 29	1930MST 1500MST	-		0	0	0	0	Heavy Snow
	leve	el trough to	produce si	now over s	souther	n secti	ons of	the state	Mexico combined with an upper e. Three inches of snow fell at common elsewhere.
NMZ002-004-005	29 30	1900MST 1300MST	-		0	0	0	0	Heavy Snow
									of snow across the northern New bserved at Cimarron Pass.
NMZ015-017, 023- 028	30 31	2000MST 1100MST		,	0	0	0	0	Heavy Snow
020			moved into	o southern					equate moisture produced sno w gordo and Carlsbad, and four to
NEW YORK, Coa		en inches at C	Corona, Ru	idoso, and	Cloud	croft.	aciicos,		gordo una curiscua, una rour co
NYZ076>081 Queens, Nassau and Suffolk County	04 04	0500EST- 1000EST			0	0	?	0	High Wind
NYZ067>070 Interior Southeast New York	04	0700EST			0	0	?	0	Snow/Ice Storm
NYZ074>081 Coastal New	04 04	1000EST- 1600EST			0	0	?	0	Coastal Flood
York	prob Ove loca had vuln the	rong low pres plems for res or the colder l amounts of plenty of othe lerable by ice	idents. A interior sec eight inches or problems accumulatinose between	dangerous ctions the s s. Althoug . High win ons. In add een three a	mixtung mixtung and the color down t	re of sn nd ice a oast eso ned nur persi si	ow, sleaccumu caped the merous tent ons	et and f lated be ne highe trees ar shore flo	iety of winter weather and major reezing rain fell across the area. It ween three and six inches with the ramounts of snow and ice, they and power lines, some made more ow caused water to pile-up along and this lead to significant coastal
NYZ067>071-079- 081 Interior	07	2200EST			0	0	?	0	Snow/Ice Storm
Southeast New York and eastern Long Island	A lo	ow pressure c	enter over	eastern Ke	entucky	/ during	g the mo	orning r	noved

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nur Per Kille	nber of sons	Esti Da d Prope	imated mage	January 1994
	low pred befo sign	, allowed wa cipitation. Tore changing	armer air to he precipit to sleet ar ccumulatio	o ride over ation start nd freezing ns. Thous	r colde ed as s g rain. sands o	er air a snow a Power of resid	t the sund accurate lines a lents los	rface. ' imulate ind larg	ont extending eastward from this This generated a wintery mix of d between four and eight inches e branches were downed due to r during the storm. In addition,
NYZ067>071 Interior Southeast New York	of p	recipitation ov	ver the regional collowed as	on. Snowfa the snow	all tota / chang	ls rang ged to	ed betw	een fou	Snow/Ice Storm  I waters deposited a wintery mix rand eight inches. A dangerous ing rain before ending. Traffi c
NYZ071 Southern Westchester County	A he	omeless man ozero tempera	died early S	unday in N	1 Mount V	<b>0</b> Vernon	0 , two ho	0 ours aft	Extreme Cold er police found him on the street.
NYZ067>070	17	2100EST	tures were	branica ro	0 m	0	?	0	Heavy Snow
Interior Southeast New York	ever eno Acc repo were	ning hours. ' ugh through umulations ra orted. This br	This was for the period the period the period the traff of the traff o	ollowed bed across een 6 and ic to a star	y a col the in 12 inc idstill t	ld fron terior hes ho through	t later that the wever shout the	hat nigle form ome iso area. I	front into the region during the ent. Temperatures remained cold of precipitation was all snow. Dated amounts of 17 inches were n addition, trees and power lines knocked power off to thousands
NYZ067>070 Interior Southeast New York	28	0300EST			0	0	?	0	Snow/Ice Storm
NEW YORK, Co	astal	Cont'd							
NYZ067>081 Southeast New York	28 28	0800EST- 2100EST			0	0	?	0	Urban Flood
IUIR	inch on t num the the rain hou	les before char the roadways nerous power warm front du area. The co s caused signi	nging over to s which in lines leavering the ear embination ficant and vevent. Nun	to sleet and turn brou ing many i ly morning of these w vides pread nerous car	l freezinght tra ght tra residen g cause varm te l urban s stalle	ng rain ffic to tts with d temp empera floodi ed out a	. The cast and a stand a stand a cout electric tures many acrost tempti	hange lastill in ctricity so to soa elting the soan ng to cr	cumulated between three and six ead to a dangerous coating of ice many locations. It also downed during the night. The passage of r into the 40s and 50s throughout he snow and the arrival of heav y rea. Many roads were closed for ross some of these flooded roads.
NEW YORK, We	stern	ı							
NYZ020 NYZ001-002-011- 012-014-022>025	04 04	1200EST 1700EST			0	0	4 4	0	Heavy Snow Heavy Snow
NYZ003-010-018 NYZ004>007-013-	04 04	1735EST 1800EST			0	0	4 4	0	Heavy Snow Heavy Snow
015>019-021 NYZ008	04	1900EST			0	0	4	0	Heavy Snow

Low pressure developed over the Southeast United States and tracked northeast along the Eastern Seaboard. The low dumped heavy snow across the entire Western New York area. Snowfal I amounts ranged from six to eight inches over the extreme western counties to 12 to 18 inches over the Eastern Lake Ontario Counties and the Eastern Finger Lakes Region. Travel quickly became

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons	Estin Dar 1 Proper	mated nage	January 1994
	The in T Schutrave	New York Sta ompkins, Chauyler Counties	ate Thruwa emung, On Emergen orists. In S	ny was clos nondaga, C ncy shelter lyracuse te	sed from Cayuga s were n inche	m Rock , Senec set up es of sn	nester ea a, Wayi through	ast. Sta ne, Lew out that	ts, some with fatalities, resulted. tes of Emergency were declared ris, Ontario, Yates, Steuben, and eleven county area for stranded in 1200EST and 1400EST and in
NYZ012 NYZ010-019-020 NYZ006	08 08 08	2000EST 2025EST 2200EST			0 0 0	0 0 0	4 4 4	0 0 0	Heavy Snow Heavy Snow Heavy Snow
	to ty whit	wo feet of sno teouts from blo	ow fell in to owing and	the squalls drifting sr	. Stroi iow. S	ng west pecific	t winds reports	caused include	e of Lakes Erie and Ontario. Up hazardous driving conditions i n ed: Warsaw 6 inches; Hamburg o inches; and Oswego 20 inches.
NYZ019-020	15	1200EST			0	0	4	0	Heavy Snow
									uqua and Cattaraugus Counties . the snow squall.
NYZ007-008 NYZ007-008 NYZ006 NYZ007-008	17 18 19 19	1900EST 1700EST 1200EST 1600EST			0 0 0 0	0 0 0 0	4 4 4 4	0 0 0	Heavy Snow Heavy Snow Heavy Snow Heavy Snow
	syst 14 ii	em was enhai	nced by a : hwest flow	southwest v of arctic	flow o air afte	ver Lak er the p	te Ontai assage (	rio. Sno	adian maritimes. Snow from the owfall reports ranged from 10 to ow resulted in lake effect squalls
NYZ006	22	1030EST			0	0	4	0	<b>Heavy Snow</b>
	A n		ffect cloud	dband drop	ped or	ver a h	alf-foot	of snov	w over a small area of Osweg o
NYZ016 NYZ025 NEW YORK, Wes	27 27 stern	1850EST 1900EST Cont'd			0	0	5 5	0	Ice Ice
NYZ023-024 NYZ022 NYZ010-011- 017>019	27 27 27	1937EST 2000EST 2100EST			0 0 0	0 0 0	5 5 5	0 0 0	Ice Ice Ice
NYZ002-012 NYZ001 NYZ020 NYZ020 NYZ003-004-013- 014-021	27 27 27 28	2200EST 2215EST 2330EST 0200EST			0 0 0 0	0 0 0 0	5 5 5 5	0 0 0 0	Ice Ice Ice Ice
NYZ006-007-015 NYZ005 NYZ008	28 28 28	0400EST 0407EST 0507EST			0 0 0	0 0 0	5 5 5	0 0 0	Ice Ice Ice
									area. Meanwhile, low pressur e s the region. Significant icin g

Frigid arctic air from high pressure was entrenched over the area. Meanwhile, low pressure approaching from the Mississippi Valley spread moisture across the region. Significant icin g occurred across Western New York. No unnecessary travel was recommended as roads iced up and numerous accidents resulted. The heavy coating of ice combined with high winds to snap power lines. Power outages were reported throughout Western New York.

#### **NORTH CAROLINA**

Northern and Central Mountains NCZ001>002,018, 033,048>050, 053>054

03 1800EST-04 0800EST 0 0 0 Heavy Snow

Snowfall of 4 to 12 inches accumulated over the northern and central mountains.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nur Per Killer	mber of sons	Esti Dai 1 Proper	mated mage rty Crops	January 1994
Statewide NCZALL	15 17	?EST- ?EST			3	0	5	0	Extreme Cold
	outh mou freez beac	oreak since lantains and i	December ranged to st of the state the coast.	1989. Ro 10 to 15 d te on the 1	ecord l legrees	oreaking at the	g low t coast.	empera Daytin	in Wayne County, in the coldest atures dipped below zero in the ne temperatures remained below burst in many places especially in
Haywood County Hazelwood	17	0800EST			0	0	4	0	High Winds
		rge section of wn down.	roof was	olown off	of a fui	niture p	olant bu	ilding	and several telephone poles were
Pender County Rocky Point	17	2025EST			0	0	4	0	Thunderstorm Winds
	An o	estimated \$22	2 thousand	of wind d	amage	occurre	ed to tw	o mobi	ile homes.
Statewide NCZALL	19 22	?EST- ?EST			6	0	0	0	Extreme Cold
	belo free: Cou	w zero over t	he mounta 0th. Six p Juilford Co	ins to the t eople died ounty, and	teens al of hypone in	long the otherm Robeso	coast.	Daytii in Rocl	mum temperatures ranging fro m ne temperatures remained below kingham County, two in Caswell
Columbus County 5 W Pireway	28	0940EST			0	0	4	0	Thunderstorm Winds
	Ove	er 40 pine tree	es were blo	own down	and a l	arge oa	k tree b	olown a	top a house.
NORTH CAROL	INA	Cont'd							
Orange County									
Cedar Grove	28	0955EST	0.1	10	0	0	0	0	Tornado (F0)
	A fu	ınnel cloud sig large tree do	ghted by a a wn.	airplane pi	lot and	a perso	n at the	groun	d touched down briefly knocking
Wayne County Seymour-Johnson Air Force Base									
All Force base	28	0955EST			0	0	0	0	Thunderstorm Winds (G51)
NORTH DAKOT.	A								
NDZ001>007-	04	1400CST-							
009>015-017 Most of Northern	05	1800CST			0	0	0	0	Heavy Snow
North Dakota	inch	es of snow fe	ell over the	rest of the	e state.	At Wi	lliston,	in nort	North Dakota, while three to six hwest North Dakota, 10.1 inches ry single-storm snowfall record.
		snowfall tha l factors to 60			Dakota	on the	4th and	d 5th w	as followed, on the 6th, by win d
	has	new snowfal made worse tiplied and th	the consta	ant snow a	nd ice	covered	d roads	. The	nat occurred earlier in the season, number of vehicle accidents has ered.
NDZ039-	10	0000CST- 0800CST			1	0	0	0	Cold

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons I Injured	Dai	mated mage rty Crops	January 1994
		oman slipped ss County), w							30)
NDZ001>053- All of North	16 18	2100CST- 0600CST			0	0	5	0	Extreme cold
Dakota	belo	er cold winds pow zero with wex at Devils L	ind chill i	ndices of	60 to 90	ta. The	temper zero.	ratures 1 At 0930	ranged from 15 below zero to 35 OCST on the 17th, the wind chill
	Thes than Dak up.	se bitter cold control of some set of some set of some set of some set of set o	onditions on snow, fror fts of snow	came in the n Thanksg w were pile	midst of the midst	of the haveek to everyv	arsh est mid Ja where a	North I nuary, I nd snov	Dakota winter in 15 years. More has fallen in many parts of North veremoval crews can barely keep
	Mar	ny water pipes	froze in	the extrem	e cold,	then ex	pandeo	d and bu	ırst.
	In ru	ural areas, son	ne people	were isola	ated in	their fa	rm hon	nes for f	rive days at a time.
OKLAHOMA									
North Central Oklahoma, Zones 007-008- 012-013-019-	06	1600CST- 2200CST			0	0	?	?	Ice
012 013 017	on t	he 6th. Ice co	vered roa	ds contrib	uted to	several	accide	nts and	late afternoon and evening hours one fatality. A man lost his life and hit another vehicle.
Bryan County Calera	11	0400CST			0	0	2	?	Lightning
	A li Cale	ghtning strik	e destroye	ed an elect	ric insu	ılator a	nd kno		at the power for several hours in
	Cale	era.							
OKLAHOMA Co	ont'd								
Southeastern Oklahoma, Zones 031-032- 042-043-	16 16	0630CST- 2000CST			0	0	?	?	Ice
047>049- 051>053-	the 1 inju	l6th. Roads b	ecame ice tality. A	covered a	ınd haz	ardous	and coi	ntribute	ch of southeastern Oklahoma on d to numerous accidents, several n an ice covered road four miles
Coal County Coalgate	16	2030CST			0	0	2	?	Lightning
50 <b>m.g</b>			hit and d	estroyed a	-	-	_		ed out the power in Coalgate.
Roger Mills 5.5 NW Reydon	26	0130CST			0	0	?	?	Hail (0.75)
Roger Mills Durham	26	0130CST			0	0	?	?	Hail (0.75)
Beckham County Delhi	26	0330CST			0	0	?	?	Hail (0.75)
Greer County 8 W Willow	26	0330CST			0	0	?	?	Hail (1.00)
Muskogee County Muskogee	26	0355CST			0	0	?	?	Hail (0.88)
Wagoner County 3 W Okay	26	0415CST			0	0	?	?	Hail (0.75)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons	Esti Da Prope	mated mage	January 1994
						3	•	, ,	
Craig County 2 W Vinita	26	0520CST			0	0	?	?	Hail (0.88)
Craig County Vinita	26	0528CST			0	0	?	?	Hail (0.80)
, 11110u	Thu		oved into v orms prod	vestern Ok luced hail	clahoma	a during	the ea		ning hours on the 26th and raced
	the g	xel-size hail ac ground in Dell iles west of V	hi and 5.5	l up to six i miles nort	inches d thwest o	leep two	o miles on. Ha	west or ail up to	f Vinita. Dime-size hail covered quarter-size covered the ground
McCurtain County 3 S Tom	26	1725CST			0	0	?	?	Hail (1.00)
	An i	solated sever luced hail up	e thunders to quarter	storm in so s-size.	outheast	Oklaho	ma du	ring the	early evening hours on the 26th
OREGON									
ORZ011	01 01	0000PST- 1400PST			?	?	?	?	Heavy Snow
	The repo	new year b	egan with ches of ne	a heavy w snow w	snowfa hile To	ll in the	e Nortl ad a 14	neastern inch ac	Oregon mountains. Meacha m
Tillamook County Netarts Bay	04	0620PST			?	?	?	?	High Winds (G65)
Tillamook County Tillamook Bay	04	0620PST			?	?	?	?	High Winds (G57)
·	The nort	strongest sto h coast but n	rm of the a	month - ar was report	nd it wa ted.	s not a	stormy	month	- produced high winds along the
OREGON Cont'd									
ORZ006, 011	04 05	2100PST- 1000PST			?	?	?	?	Heavy Snow
	mov		regon on t	he 4th. T	he Nort	thern Ca	ascades	s receiv	e wake of the frontal system that ed 10 to 20 inches of new sno w
PENNSYLVANIA	, We	estern							
PAZ001>036 All	04	0300EST- 1200EST			0	185	6	0	Heavy Snow
	Eng Atla heav	land. The s	torm, whi eavy snow ow in west	ch develo was depo ern Pennsy	ped ove sited al Ivania	er the C ong, and fell in th	Gulf Co d just v ne extro	oast Stavest of the source of	southern Appalachians into New tes, tracked northeast along the the Appalachian Mountains. The thwest corner of the State where
	Pitts		Clymer, 16	at Somerse					24 at Charleroi, 20 in downtown ational Airport, 12 at St. Mary's,

The fast accumulating snow forced the closing of the Pennsylvania Turnpike and halted traffic on both Interstates 70 and 79. Traffic was backed up on Interstate 70 from Washington to Yukon, o r about 25 miles. The Pittsburgh International Airport was also closed for the day, and did not resume limited operations until the 5th. On the 6th, Governor Casey declared a State of Emergency for Fayette, Greene, Washington, and Westmoreland Counties. A force of 111 soldiers and airmen from the Pennsylvania National Guard assisted in snow removal.

The weight of the heavy snow was responsible for numerous roof collapses to outbuildings, garages, barns, and carports. In Greene County, the roof of a veneer plant collapsed. The mill and equipment in the building were heavily damaged. In Erie County, the accumulation of ice and snow was

January 1994 Number of Persons Path Length Estimated Damage Time Local/ Path Width believed to be responsible for a four car locomotive derailment in Summit Township. No deaths were directly related to the snowfall, however, there were a number of heart attack victims from people trying to shovel snow. According to a Pittsburgh newspaper, there were approximately ten deaths due to heart attacks and 185 injuries from people falling on ice and vehicle accidents. PAZ012-018-019-025>028-1500EST 3 3 0 Ice 034>036 Clinton, Centre, Blair, Huntingdon, Mifflin, Juniata, Bedford, Fulton, Franklin Counties Freeing rain fell over the central and southern mountains. One-quarter to three-quarters of an inch of ice accumulated on trees and power lines causing scattered power outages. Several injurie s resulted from ice related accidents in Franklin County. **PAZ030 Heavy Snow** Westmoreland The collapse of a 40- by 60-foot hanger at the County Airport was believed to be the result of heavy snow. Four airplanes were damaged totaling nearly \$75 thousand in damage. County PAZ001>036 14-129 **Extreme Cold** All An arctic air mass caused temperatures to plunge 20 to 40 degrees below normal. Ambient air temperatures fell below zero for overnight lows. On the morning of the 19th, the temperature at the Pittsburgh International Airport dipped to 22 degrees below zero, breaking the all time record low of 20 degrees below zero from February 10, 1871. Erie International Airport also broke their all time record low by falling to 18 degrees below zero, likewise at Johnstown when the mercury hit PENNSYLVANIA. Western Cont'd 19 below. The coldest temperature recorded in western Penn sylvania on the 19th occurred at Wilcox, where the temperature dipped to 38 below. Other low temperatures for the 19th: -35 at Kane, -34 at Van, -32 at Waynesburg, -31 at Brookville, -30 at Russell, -29 at St. Marys, -25 at Altoona, and -19 at State College. Wind chill temperatures on the evenings of the 15th and 18th ranged from 35 to 70 below zero with the coldest wind chill of -70 occurring at Johnstown on the evening of the 18th. On the 19th, Governor Casey declared a State of Emergency. This declaration remained in effect through midnight on the 21st. The Governor called for conservation of electricity as power companies considered the use of rolling blackouts. Go vernment offices and schools were closed, and businesses were asked to voluntarily close. Thousands of residences were damaged by the extreme temperatures. Water pipes froze and burst. Roofs buckled, and awnings and gutters collapsed. The freeze may also have damaged fruit tree buds. An extension service in Erie County estimated a 27% bud loss. In Allegheny County, an 81 year old woman froze to death when she attempted to retrieve mail from her mailbox. In Lawrence County, a 70 year old New Castle woman was found froze to death on her porch. In Erie County, a 58 year old woman died from hypothermia in her home. Hospitals areawide reported numerous cases of frostbite, hypothermia, and heart attacks from the extreme cold. (F810) (F70P) (F580) 0700EST **PAZ002** 0 0 0 **Heavy Snow Inland Erie** Eight inches of snow fell at Albion. PAZ001>036 0700EST-All 1900EST 0 5 0 **Heavy Snow** A fast moving storm system moved from Texas to Virginia dumping heavy amounts of snow across southern Pennsylvania. In Franklin County, the snow fell at a rate of four inches an hour with Chambersburg picking up a quick 20 inches of snow. Other amounts included: 17 inches at

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numl Perso Killed	per of ons Injured	Estim Dam Property	age	January 1994
	Gree	encastle, 12 at E Latrobe, and ge	verson, 11 eneral 6 inc	at Lewist	own, 9	9 at Mu	rrysvill northeri	e and I n half o	Huntingdon, 8 inches at Altoona f western Pennsylvania.
	This Seve Tow by 1 build	snowfall in cor eral barns collap nship. A double 70-foot greenho	mbination v sed in Miffl wide mobil ouse collaps building a	with the salin and Fra e home p sed, and is t the Wes	nowfa anklin artially n Wes	ll earlie Counti y caved tmorela	er in the es, one l-in at C and Cou	month of which hambe	led to more building collapses. ch trapped three cows in Antrim rsburg. In Greene County, a 40- e roof of the Parker-Daedal Inc. Mercer County also collapse d
PAZ010 Elk	23	1000EST			1	0	3	0	Heavy Snow
<del></del>		vy snow from p . (M??0)	previous sn	ows resul	ted in	a roof	collaps	e that c	laimed the life of a Saint Marys
Somerset County Rockwood	26	0831EST- 1100EST			0	0	0	0	Flood/Flash Flood
	An i	ce jam on Cox	es Creek ca	used bac	kwate	r floodi	ng betv	veen Ro	ockwood and Somerset.
Westmoreland County 5 S Latrobe	26	1150EST- 1600EST			0	0	2	0	Flood/Flash Flood
	An i Eato	ce jam on Loy on Road to Rou	alhanna Cr te 30. Anot	eek cause ther ice ja	ed bacl ım at <b>k</b>	kwater Kingsto	floodin n isolat	g which	h covered State Route 982 from house.
PAZ030-032 Westmoreland, Fayette Counties	27	0700EST- 1400EST			0	0	3	0	High Winds
PENNSYLVANIA	, We	estern Cont'	d						
	Sust	d gusts to 59 ained winds of 2 nslope winds f	25 to 50 MI	PH were a	also ol	oserved	Derry. at Hop	Trees wood.	and power lines were downed. The high wind was the result of
PAZ004>006-009> 011-015>019- 023>028-033>	27	1400EST- 2200EST			0	62	4	0	Ice
036 Southern, Central, Northern and Laurel Mountains									
	of c	zing rain depo- entral Pennsyl oitals reported i	vania. Tre	es and po	ower li	ines we	ere dow	inch of ned re	ice over the mountainous areas sulting in power outages. Are a
Consum Consum	The	accumulated ice	e in combin	ation witl	h earli	er snov	/falls re	sulted	in additional building collapses.
Greene County Countywide	28 29	0830EST- 0600EST			0	0	4	0	Flood/Flash Flood
	up a	n emergency sł	ielter at the	: Jeffersoi	n Firel	ıall to r	orovide	lodging	n high water. The Red Cross set g for people who were forced to ere also evacuated from the Red reached the electrical boxes.
Washington County Countywide	Rout	<b>8838EST</b> - espread flooding te 481 was also y ashington, Ho	closed when	n Pigeon (	<b>0</b> e 221 Creek o	<b>0</b> was clo	3 osed betweed its	<b>0</b> tween T banks.	Flood/Flash Flood Caylerstown and Route 40. State Urban flooding was widespread
Beaver County Countywide	28 29	0930EST- 0600EST	, "		0	0	3	0	Flood/Flash Flood

Westmoreland County Countywide  28 1215EST- 29 0600EST 0 0 0 5 0 Flood/Flash Flood Widespread flooding was observed. An ice jam also caused flooding on Pierces Run Creek. Fifty to sixty homes were evacuated along the swollow of the vacuation of residence of the vacuation of t	Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons Injured	Esti Da: Prope	mated mage rty Crops	January 1994 Character of Storm
28   121EST-   0   0   5   0   Flood/Flash Flood										
resulted in flooding of several homes. An ice jam also caused flooding on Pierces Run Creek, Fifty to sixty homes were eacutated along the swollen Youghingheny River, About 40 of these home sustained water damage. At Lock 4 on the Monog ahela River the stage reached 32.8 feet; flood stage is 28 feet.  Armstrong County  28		28				0	0	5	0	Flood/Flash Flood
Roads were closed along Buffalo Creek. The Kiski River was eight to ten feet over its flood stage, a result of a two mile long ice jam. Basement flooding was reported in Kittanning, Ford City, and Rural Valley.    Allegheny County County County Countywide   28		to si	lted in floodi ixty homes v ained water d	ng of sever were evacu	ral homes. ıated along	An ice g the sv	jam als vollen Y	so caus Youghi	ed flood ogheny	ding on Pierces Run Creek. Fifty River. About 40 of these home s
Allegheny County Countywide  28						0	0	3	0	Flood/Flash Flood
Countywide 28 1651EST- 2000EST 0 0 3 0 Flood/Flash Flood Widespread urban flooding was observed.  PENNSYLVANIA, Western Cont'd  Butler County Countywide 28 1720EST- 29 0600EST 0 0 4 0 Flood/Flash Flood Widespread flooding was observed in the southwest part of the county near Harmony and Zelionople Breakneck and Connoquenessing Creeks were in flood resulting in several evacuations. Severa homes had to be evacuated by boats.  Bedford County Countywide 28 1720EST- 2000EST 0 0 0 Flood/Flash Flood Some minor flooding was observed along area streams.  Clarion County Countywide 28 1811EST 29 0600EST 0 0 0 Flood/Flash Flood Redbank Creek flooded Route 28 at New Bethlehem.  Jefferson County Countywide 28 1811EST- 29 0600EST 0 0 3 0 Flood/Flash Flood Redbank Creek spilled over its bank depositing eight inch thick chunks of ice. Baxtor Bridge wa Somerset County Countywide 28 1841EST- 29 0600EST 0 0 3 0 Flood/Flash Flood Laurel Hill Creek at Ursina was blocked by a 1.5 mile ice jam. One home was flooded.  Venango County Oil City 29 0300EST 0 0 4 0 Flood/Flash Flood		a res	sult of a two							
PENNSYLVANIA, Western Cont'd  Butler County Countywide  28 1720EST- 29 0600EST  0 0 4 0 Flood/Flash Flood Widespread flooding was observed in the southwest part of the county near Harmony and Zelionople Breakneck and Connoquenessing Creeks were in flood resulting in several evacuations. Severa homes had to be evacuated by boats.  Bedford County Countywide  28 1720EST- 2000EST  0 0 0 Flood/Flash Flood Some minor flooding was observed along area streams.  Clarion County Countywide  28 1811EST 29 0600EST  0 0 0 Flood/Flash Flood Redbank Creek flooded Route 28 at New Bethlehem.  Jefferson County Countywide  28 1811EST- 29 0600EST  0 0 3 0 Flood/Flash Flood Redbank Creek spilled over its bank depositing eight inch thick chunks of ice. Baxtor Bridge wa closed: Some basement flooding observed.  Somerset County Countywide  28 1841EST- 29 0600EST  0 0 3 0 Flood/Flash Flood Laurel Hill Creek at Ursina was blocked by a 1.5 mile ice jam. One home was flooded.  Venango County Oil Cify  29 0300EST  0 0 4 0 Flood/Flash Flood		28				0	0	3	0	Flood/Flash Flood
Butler County Countywide  28 1720EST- 29 0600EST  0 0 4 0 Flood/Flash Flood  Widespread flooding was observed in the southwest part of the county near Harmony and Zelionople Breakneck and Connoquenessing Creeks were in flood resulting in several evacuations. Severa homes had to be evacuated by boats.  Bedford County Countywide  28 1720EST- 2000EST		Wid	lespread urba	ın flooding	was obse	rved.				
Butler County Countywide  28 1720EST- 29 0600EST  0 0 4 0 Flood/Flash Flood  Widespread flooding was observed in the southwest part of the county near Harmony and Zelionople Breakneck and Connoquenessing Creeks were in flood resulting in several evacuations. Severa homes had to be evacuated by boats.  Bedford County Countywide  28 1720EST- 2000EST	PENNSVI VANIA	Wa	estern Cor	nt'd						
Countywide 28 1720EST- 29 0600EST 0 0 4 0 Flood/Flash Flood Widespread flooding was observed in the southwest part of the county near Harmony and Zelionople Breakneck and Connoquenessing Creeks were in flood resulting in several evacuations. Severa homes had to be evacuated by boats.  Bedford County Countywide 28 1720EST- 2000EST 0 0 0 Flood/Flash Flood Some minor flooding was observed along area streams.  Clarion County Countywide 28 1811EST 29 0600EST 0 0 0 Flood/Flash Flood Redbank Creek flooded Route 28 at New Bethlehem.  Jefferson County Countywide 28 1811EST- 29 0600EST 0 0 3 0 Flood/Flash Flood Redbank Creek spilled over its bank depositing eight inch thick chunks of ice. Baxtor Bridge wa Closed. Some basement flooding observed.  Somerset County Countywide 28 1841EST- 29 0600EST 0 0 3 0 Flood/Flash Flood Laurel Hill Creek at Ursina was blocked by a 1.5 mile ice jam. One home was flooded.  Venango County Oil City 29 0300EST 0 0 0 4 0 Flood/Flash Flood		., ***	cstern cor	it u						
Breakneck and Connoquenessing Creeks were in flood resulting in several evacuations. Severa homes had to be evacuated by boats.  Bedford County County    28			1720EST- 0600EST			0	0	4	0	Flood/Flash Flood
Countywide 28 1720EST- 2000EST 0 0 0 Flood/Flash Flood  Some minor flooding was observed along area streams.  Clarion County Countywide 28 1811EST 29 0600EST 0 0 0 Flood/Flash Flood  Redbank Creek flooded Route 28 at New Bethlehem.  Jefferson County Countywide 28 1811EST- 29 0600EST 0 0 3 0 Flood/Flash Flood  Redbank Creek spilled over its bank depositing eight inch thick chunks of ice. Baxtor Bridge wa  Somerset County Countywide 28 1841EST- 29 0600EST 0 0 3 0 Flood/Flash Flood  Laurel Hill Creek at Ursina was blocked by a 1.5 mile ice jam. One home was flooded.  Venango County Oil City 29 0300EST 0 0 0 4 0 Flood/Flash Flood		Brea	akneck and	Connoque	nessing Cr	he south eeks w	iwest pa ere in f	rt of th flood re	ne count esulting	ty near Harmony and Zelionople. in several evacuations. Severa l
Clarion County Countywide  28 1811EST 29 0600EST 0 0 0 0 Flood/Flash Flood  Redbank Creek flooded Route 28 at New Bethlehem.  Jefferson County Countywide  28 1811EST- 29 0600EST 0 0 0 3 0 Flood/Flash Flood  Redbank Creek spilled over its bank depositing eight inch thick chunks of ice. Baxtor Bridge wa  Somerset County Countywide  28 1841EST- 29 0600EST 0 0 3 0 Flood/Flash Flood  Laurel Hill Creek at Ursina was blocked by a 1.5 mile ice jam. One home was flooded.  Venango County Oil City  29 0300EST 0 0 0 4 0 Flood/Flash Flood		28				0	0	0	0	Flood/Flash Flood
Countywide 28 1811EST 29 0600EST 0 0 0 Flood/Flash Flood  Redbank Creek flooded Route 28 at New Bethlehem.  Jefferson County Countywide 28 1811EST-29 0600EST 0 0 3 0 Flood/Flash Flood  Redbank Creek spilled over its bank depositing eight inch thick chunks of ice. Baxtor Bridge wa closed. Some basement flooding observed.  Somerset County Countywide 28 1841EST-29 0600EST 0 0 3 0 Flood/Flash Flood  Laurel Hill Creek at Ursina was blocked by a 1.5 mile ice jam. One home was flooded.  Venango County Oil City 29 0300EST 0 0 0 4 0 Flood/Flash Flood		Som	ne minor floo	ding was o	observed a	long ar	ea strea	ıms.		
Jefferson County Countywide  28 1811EST- 29 0600EST 0 0 0 3 0 Flood/Flash Flood  Redbank Creek spilled over its bank depositing eight inch thick chunks of ice. Baxtor Bridge wa  Somerset County Countywide  28 1841EST- 29 0600EST 0 0 3 0 Flood/Flash Flood  Laurel Hill Creek at Ursina was blocked by a 1.5 mile ice jam. One home was flooded.  Venango County Oil City  29 0300EST 0 0 4 0 Flood/Flash Flood						0	0	0	0	Flood/Flash Flood
Countywide 28 1811EST- 29 0600EST 0 0 3 0 Flood/Flash Flood  Redbank Creek spilled over its bank depositing eight inch thick chunks of ice. Baxtor Bridge wa  Somerset County Countywide 28 1841EST- 29 0600EST 0 0 3 0 Flood/Flash Flood  Laurel Hill Creek at Ursina was blocked by a 1.5 mile ice jam. One home was flooded.  Venango County Oil City 29 0300EST 0 0 0 4 0 Flood/Flash Flood		Red	bank Creek f	looded Ro	ute 28 at N	New Be	thlehen	n.		
Somerset County Countywide  28 1841EST- 29 0600EST 0 0 3 0 Flood/Flash Flood  Laurel Hill Creek at Ursina was blocked by a 1.5 mile ice jam. One home was flooded.  Venango County Oil City  29 0300EST 0 0 4 0 Flood/Flash Flood	Jefferson County Countywide	28 29	1811EST- 0600EST			0	0	3	0	Flood/Flash Flood
Somerset County Countywide  28 1841EST- 29 0600EST 0 0 3 0 Flood/Flash Flood  Laurel Hill Creek at Ursina was blocked by a 1.5 mile ice jam. One home was flooded.  Venango County Oil City  29 0300EST 0 0 4 0 Flood/Flash Flood		Red	bank Creek	spilled ove	er its bank	deposit	ing eig	ht inch	thick c	hunks of ice. Baxtor Bridge was
Venango County Oil City 29 0300EST 0 0 4 0 Flood/Flash Flood	Somerset County Countywide	28	1841EST-	sement no	oung ous					
Oil City 29 0300EST 0 0 4 0 Flood/Flash Flood				k at Ursina	was blocl			_		
Basements and businesses were flooded by water from an ice jam on Oil Creek.	Venango County Oil City	29	0300EST			0	0	4	0	Flood/Flash Flood
		Base	ements and b	ousinesses	were flood	led by v	water fr	om an	ice jam	on Oil Creek.

**Erie County** 

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estir Dan Proper	nated nage ty Crops	January 1994
Countywide	29 30	1525EST- 0500EST			0	0	0	0	Flood/Flash Flood
	Cree on th	k, water levels	were 15 f	eet above	normal	. Lawre	ence Pa	rk Poli	Routes 5 and 20. On Four Mil e ce noticed a massive ice buildup he ice to relieve pressure behind
RHODE ISLAND									
RIZ002-004>007	04	0800EST- 1100EST			0	0	0	0	High Winds
	baros press	sed snow and metric pressure sure fell from 2	sleet, a p e, or "gravi 9.56 inche	eriod of h ty waves.' es at 8:50 A	igh wir 'At th AM to	nds, and e Natio 29.25 in	d some onal We nches 2	unpreceather S 8 minu	Atlantic coast toward Cape Co dedented short-period changes in ervice Office in Providence, the tes later! A short period of high core than 50 mph at Newport.
RIZ006-007	07	0800EST- 2000EST			0	0	0	0	Heavy Snow
RIZ001>005	07 08	1200EST- 0500EST			0	0	3	0	Heavy Snow
RIZ001-003- 004-006-007	07 08	2000EST- 0800EST			0	0	5	0	Ice Storm
RHODE ISLAND	Con	t'd							
RIZ002-005	08	0000EST- 0800EST			0	0	4	0	Glaze
	7th, a find the e hour up to utili power to sl	and continued ches at Newpowening hours of so of the 8th over the second of the second	into the mort, and 10 of January er the rem glaze alor knocked y, Warwice repair gar gar ain cau	orning of to inches at 7th over the ainder of the ainder of the age Interstate down by kk, Narrow age collaps sed massiv	he 8th, Foster. he sout he state te 95 in the hear ragans ed in Readers we head	produce The sign south a south the sign south a sign sout	ced sno now ch ortion o gnifican west R buildup rth Kin Id un de for high	wfall to anged the standard the	ecame heavy around noon on the tals of 7.8 inches at Providence, o sleet then freezing rain during atte and during the early morning mulation of glaze occurred, with land. Numerous tree limbs and to 10,000 electric customers los to West Greenwich, and Scituate. Eight of the snow and ice. Snow expartments. Numerous highway which jack-knifed.
RIZALL	15 16	1800EST- 1800EST			0	0	0	0	Cold
	Stron from Nation	ng northwest w 30 to 50 belov onal Weather S rd for the 16t	yinds acco w zero. At Service at I th of Janu	mpanied the the highest providence ary. The i	ne cold it elevat recorde maximi	and dre ions, wi ed a m i um tem	ove wind child ind child ind child indicate indi	nd chill Is drop temper e of on	o near-record low temperatures . indices to extremely low values ped to 60 to 70 below zero. The ature of -3 degrees, equaling the ly 7 degrees equaled the lowes t ord for the date.
RIZALL	18 19	1800EST- 1000EST			0	0	0	0	Cold
	of 25	5 to 35 degrees	below zer	o. A maxi	mum te	mpera t	ure of o	only 10	to 30 mph produced wind chills degrees at Providence set a new ary 19th of 11 degrees.
RIZALL	28	1200EST- 1900EST			0	0	0	0	Heavy Rain
RIZALL	28	1200EST- 1800EST			0	0	0	0	High Winds
	Stroi	ng south winds	brought a	surge of vo	ery moi	st air an	nd mu c	h warm	er temperatures across the entire

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estin Dam Propert	age	January 1994
	floogusti zero New few	ding. Up to c ing from 40 to and below z port Bridge du	one foot of 60 mph dr ero tempe uring the hi	water covove temper ove temper ratures 30 igh winds.	ered st ratures hours o A spo	reets in into the earlier. tter rep	n some a e 50s, a A trac oorted a	areas. S rise of tor-sem wind g	videspread street and basemen to Strong to gale force south winds some 50 to 60 degrees from the itrailer truck jack-knifed on the cust to 61 mph in Providence. And during the morning hours of
SOUTH CAROLI	NA								
SCZ031 Sumter County	03	Night			0	0	?	?	High Winds (G45)
	High hom	n winds associates in the Sum	ated with a ter area.	cold fronta	al pass	age cau	ised mii	or dam	nage and disrupted power to 100
SCZ001-003 Mountains	03 04	2100EST- 0800EST			0	0	?	?	Snow
		nt snow accumus ss the foothill							le a rain/snow mix was reported ntains.
<b>Edgefield County</b>	09	Unknown			1	0	0	0	Low Temperature
	Fort	y-three year o	ld man die	ed from co	ld expo	sure. C	Cold (M	43U)	
Williamsburg County	10	Unknown			1	0	0	0	Low Temperature
SOUTH CAROLI	NA (	Cont'd							
	Fort	y-five year ol	d man died	d from cold	l exnos	sure C	old (Ma	<b>45I</b> I)	
SCZ001-007 Mountains & Northern Foothills		0300EST- 1200EST		a nom con	0	0	?	?	Freezing Rain
	Spar	nt freezing ra	ens, and O	Conee Cou	nerous inties.	traffic The ra	e accid	ents in	northern parts of Greenville, bunted to less than 0.10 inch but
SCZ001-005 Statewide	15 20	0000EST- 2359EST			?	?	?	?	Cold
	dam com Artic	aged winter cr panies set nev	ops. A nur oper-us over the sta	mber of fire se records. ate most of	s were A few the pe	reporter school with the schoo	ed from Is and b	straine ousiness	merous busted water pipes, and d heating systems. Most power ses were closed for lack of heat. aperatures on the 16th and again
SCZ50 Charleston County Awendaw	16	Unknown			1	0	0	0	Low Tomporeture
Awendaw	Mar		hypotherm	nia one-hal					Low Temperature had bogged down in a mudd y
0.07010	oren	uru.(1 <b>v1</b> 07 <b>0</b> )							
SCZ010 Anderson County	17	Early AM			1	0	0	0	Low Temperature
·	A w	oman apparent	ly locked one. Time of	out from he f death was	r home s appar	was for	ound dea hortly a	ad from fter mid	hypothermia under a porch 200 lnight.(F50O)
SCZ001,008-10						-	-		
Mountains & Foothills	17	0800EST- 1500EST			0	0	?	0	Ice Storm
SCZ11,13-19 Piedmont	17	0800EST-			0	0	?	0	Sleet, Freezing Rain

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons Injured	Estin Dan Propert	age	January 1994
		1200EST							
	reach place of 0. In th	ned storm crite es. In Oconee 50 inch or so v	eria in the and Pick which dow ecipitatio	Foothills are Fo	and M es the trees a ewer p	ountain precipit nd pow roblems	s where ation w er lines s but the	a coup as most This rere were	ous traffic accidents. The event le of inches of sleet fell in most ly freezing rain causing a glaze resulted in some power outages. e a number of traffic accidents - affic deaths.
<b>Anderson County</b>	17	Unknown			1	0	0	0	Low Temperature
	Fort	y-eight year o	ld woman	died from	cold e	exposur	e. Cold	(F48U)	
<b>Spartanburg County</b>	22	Unknown			1	0	0	0	Low Temperature
	Eigh	ity-four year o	old woman	n died from	n cold	exposur	e. Colo	l (F84U	)
<b>Colleton County</b>	23	Unknown			1	0	0	0	Low Temperature
	Eigh	ity-five year o	ld womar	died from	cold e	exposur	e. Cold	(F85U	)
<b>Pickens County</b>	25	Unknown			1	0	0	0	Low Temperature
	Sixt	y-nine year ol	d man die	d from col	d expo	sure. C	Cold (M	69U)	
SOUTH DAKOTA	1								
SDZ001>004-009- 012>016-024>035- 041>049	03	1200MST- 1900MST			0	0	3	0	High Winds
Western South Dakot	a High in We 62 n	northwest wir estern South D iph at 1522 M	nds gustin Jakota incl IST.	g from 50 to uding the R	o 70 m apid C	ph cause ity area.	ed n umo	erous po eak win	ower outages and minor damage d gust at Rapid City airport was
SDZ002>011-014> 024-034-036-037- 039-040-055	05	0300CST- 1900CST			0	0	?	0	Heavy Snow
North-central and No South Dakota	Mod gene Aber wind	erate to heavy erally three to rdeen. Many I chills of 50 bo trailers in sep	o six inch schools in elow zero	es of snov n the area and areas o	vfall e were c f blow	xcept follosed at	or an ai midday w. Two	rea of 8 y on the o state si	h Dakota on the 5th. There was to 12 inches near and east of 5th and again on the 6th due to nowplows collided with tractore 6th resulting in injuries to two
SDZ001-002-012- 013-024>026-028- 031-043	13 14	1900MST- 0300MST			0	0	0	0	Heavy Snow
Western South Dakot	Snov	wfall of 12 to 1 g reported fro							rith generally three to six inches
SDZ001-002-012> 014-024>033-041> 047	16	0300MST- 0900MST			0	0	?	0	High Winds
Western South Dakot	Very	y strong north l gust of 64 m	nerly wind ph was re	ls of 50 to ported at F	65 mp Rapid (	h affect City Air	ted port	ions of 0454 M	western South Dakota. A pea k ST.
SDZ003>011-016> 023-036>040-053> 056-061	17	1000CST- 1900CST			0	0	?	0	Extreme Cold
Northeast and East-ce South Dakota	Stroi to p cons	ng northwest v roduce lethal iderable blowi	wind ching of the t	ills of 60°1 wo to five	to 90 l inches	below z recent	zero. W snowfal	hiteout I that o	es of 15 below to 25 below zero conditions were reported wit h ccurred from 0600 to 1400 CST ny events cancelled on both the

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nun Per Killed	nber of sons L Injured	Esti Dai Prope	mated mage rty Crops	January 1994
	Pres were	ston and the c	rew had to owdrift 14	be rescue miles east	d by si of McIi	nowmol nto sh in	bile ear Corso	ly on th n Coun	e stuck in high drifts east of Lake ne 18th. Also three train engines ty. Because of the extreme cold, nes burst.
SDZ012-013-024> 030-041-042	17	0000MST- 1800MST			0	0	0	0	Heavy Snow
Southwest South Dake	Hea	vy snow of o	ver eight i	nches occ	urred in	n the we	estern l	Black H ack Hill	fills with 17.5 inches reported a t s.
SDZ007-008-011- 018>023-035>040- 046-047-049-050-052>0	26 27 070	1700CST- 1700CST			0	0	4	0	Heavy Snow
Eastern and South-cer South Dakota	n <b>tral</b> Hea area Prol	as. However,	11 inch st llt of this s	torm totals storm a 48	were foot by	recorde , 76 foo	d at Sic	oux Fall	a with five to ten inches in most ls, Wagner, Huron, and Webster. d roof collapsed from the weight
SDZ001-012-013- 024-025-028 Northwest	29	0600MST- 2000MST			0	0	0	0	Heavy Snow
South Dakota and nor SOUTH DAKOTA									
	relat	y heavy snow tively moist ar six inches at	ıd unstable	air. Storm	to tals	include	d 33.4	lt of a s inches	strong northerly flow of cold but tat Lead, 12 inches at Deadwood,
TENNESSEE			-						
TNZ14>18,38>47,	04 04	1200CST- 2300CST			0	0	2	0	Snow
		vinter storm d sed by the sno		ır to six in	ches of	f snow o	on Nor	theast T	ennessee. Numerous roads were
TNZ13>18,36>47, 69>74	14 15	1800CST- 0600CST			0	0	1	0	Snow
	Up	to two inches	of snow f	ell on part	s of No	ortheast	Tenne	ssee.	
Davidson County Nashville	15	0600CST			1	0	0	0	Cold
	A h	omeless man	died due t	o exposure	to the	cold. (	M?O)		
TNZALL	16 17	1800CST- 1600CST			0	0	3	0	Snow
		vinter storm pour inches of							f the state received between two fayette.
TNZ22	27 27	1800CST- 1900CST			0	0	2	0	High Winds
	Nur	nerous trees v	vere blow	n down in	the Car	mden ar	rea of E	Benton (	County.
TNZ68>74,85>87, 100>102	28	0130CST- 0400CST			0	0	5	0	High Winds
	Hig blov dem	h winds blew wn down in nolished in M	through the Etowah, I aryville, B	ne southea McMinn ( lount Cou	st corn County nty. N	er of the . A buumerou	e state. uilding is trees	Some that w were bl	roofs, shingles and awning were as holding six helicopters was own down.
TEXAS, Panhandl	le								
Briscoe County Silverton	26	0135CST			0	0	0	0	Hail (0.75)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estii Dar Proper	nated nage ty Crops	January 1994			
Collingswoth County 5 N Wellington	26	0254CST			0	0	0	0	Hail (1.00)			
3 iv Wennigton	First		ther of the severe le	e year occ vels upon	urred a	s a line	e of thu	ındersto	rms moving through the Texa s			
ZTX001-002, 005, 007>020, 022>026	30	0300CST 1800CST			0	0	5	0	Heavy Snow			
	early after acco Ama	A major snow storm moved across the Texas panhandle this Super Bowl Sunday. The snow began early in the morning hours with the heaviest intensity occurring from about sunrise into the early afternoon. All zones received at least four inches with a corridor from Dalhart to Silverton accommulating the most. Silverton reported 15 inches, Clarendon 10 inches, Canyon 9 inches Amarillo 10 inches, Borger 7 inches. Most areas received six to eight inches. Property loss was mostly vehicle damage and was minimal because of the timing of the event.										
TEXAS, Northern												
Rains County 1 NE Emory	16	2248CST			0	0	2	0	Thunderstorm Winds			
	A tre	ee was blown	down by	thundersto	rm win	ds.						
TEXAS, Northern	Con	t'd										
Lake Tawakoni	16	2340CST			0	0	3	0	<b>Thunderstorm Winds</b>			
	Windows were blown out of a house by high winds.											
Panola County 8 NW Carthage	25	1810CST			0	0	2	0	Hail (1.00)			
Totum	Hail 25	broke the win	nshields fr	om two ca		0	4	0	Liahtnina			
Tatum		1825CST atning struck a	house se	atting it afi	0	0	4	U	Lightning			
Harrison County	Ligii	itilling struck a	i ilouse, se	ttillg it all	iic.							
Gill Gill	25 25	1837CST 1837CST			0	0	$\frac{0}{2}$	0	Hail (1.00) Thunderstorm Winds			
GIII		ng winds caus	sed large t	ree limbs	·	-	_	v	Thunderstorm Winds			
Elysian Fields	25	1850CST			0	0	2	0	Thunderstorm Winds			
	Tree	limbs were b	lown dow	n. Pea-siz	ze hail a	also oc	curred.					
Cass County Queen City	25	1910CST			0	0	2	0	Lightning			
	Tree	s were struck	by freque	nt cloud-te	o-grour	nd light	ning. I	Pea-size	hail also fell.			
Rusk County Pleasant Grove	26	1325CST			0	0	0	0	Hail (1.75)			
2 W Mount Enterprise	26	1340CST			0	0	0	0	Hail (1.75)			
4 NE Mount Enterprise	26	2008CST			0	0	0	0	Hail (1.00)			
Trinity County Groveton	26	1600CST			0	0	0	0	Hail (0.75)			
Smith County Tyler	26	1630CST			0	0	0	0	Hail (2.00)			
	Larg	ge hail fell nea	r the High	nway 110 l	Loop.							
Wood County Winsboro	26	1710CST			0	0	7	0	Hail (2.75)			

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nur Per Killed	nber of sons	Esti Dar 1 Proper	mated mage ty Crops	January 1994
Coke	26	l did approxin  1900CST I damaged car	•		0	damage <b>0</b>	e to 2,50	00 cars, <b>0</b>	many homes, and businesses.  Hail (2.00)
Bowie County 4 NW DeKalb 4 SW Nash	26 26	1718CST 2016CST	.s, 1001s, a	nu winuo	0	0	0	0	Hail (0.88) Hail (0.88)
Panola County 8 NW Carthage 5 W Deadwood	26 26	1810CST 2018CST			0	0	0 3	0	Hail (1.00) Thunderstorm Winds
	Nun	nerous trees ooted or broke	were blow en off, bloo	n down or cking the r	n a 200 oad.	) acre p	lot alor	ng the S	abine River. Several trees wer e
Harrison County Gill 3 SE	26	1837CST			0	0	0	0	Hail (1.00)
Scottsville	26	2017CST			0	0	0	0	Hail (1.00)
TEXAS, Northern	Con	ıt'd							
Hopkins County Black Oak	26	1900CST			0	0	0	0	Hail (1.75)
Upshur County Gilmer Franklin County	26	1900CST			0	0	0	0	Hail (2.00)
4 W Mt. Vernon Cass County Hughes Springs 8 NW Linden	26 26 26	1905CST 1947CST 2015CST			0 0	0 0 0	0 0 0	0 0 0	Hail (2.75)  Hail (0.88)  Hail (1.75)
5 SW Atlanta Cherokee County	26 26	2231CST 2035CST			0	0	0	0	Hail (1.00) Flash Flood
0110101100		nerous Count	y and Farn	n-to-Mark		-		-	
Morris County Lone Star	26	2205CST			0	0	0	0	Hail (1.00)
Marion County 4 NW Jefferson	26	2218CST			0	0	0	0	Hail (1.00)
Bell County Belton	27	0921CST			0	0	0	0	Hail (0.75)
Coryell County Evant Jonesboro	27 27	0925CST 0930CST			0	0	0	0	Hail (0.75) Hail (0.75)
McLennan County McGregor Robinson Hewitt Lorena Waco	27 27 27 27 27 27	0932CST 0943CST 0944CST 0945CST 0948CST			0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	Hail (0.75) Hail (0.75) Hail (1.50) Hail (1.75) Hail (1.00)
NTZ083>089-	One 30 30	-inch hail wa 1600CST- 2350CST	s reported	at the Uni	versity 0	of Bay	lor can	npus.	Snow

During the late afternoon and evening hours on the 30th, two to four inches of snow with a few local

January 1994 Number of Persons Path Length Path Width Estimated Damage Time Local/ amounts in excess of five inches fell across the western part of north Texas. Several traffic accidents occurred and schools were closed or delayed opening the following day. TEXAS, Southern Walker County 1430CST 0 3 Hail Kitral 26 KTRE-TV in Lufkin relayed report of three-quarter inch hail in northern Walker County near the town of Kitral. Lavaca County Moulton 27 1045CST Hail (1.00) Moulton Police reported hail between 0.50 and 1.00-inch-diameter over the northern half of Lavaca County, just east-northeast of Moulton. No significant damage was indicated. **Fayette County** Flatonia 1055CST Hail (1.00) 27 Hail between 0.50 and 1.00-inch-diameter was reported in the southern portion of Fayette County, near Flatonia. A radio station in LaGrange relayed a report of pea-size to marble-size hail in Schulenberg. TEXAS, Southern Cont'd **Brazoria County** Pearland, 2 SW 27 1100CST 3 3 **Thunderstorm Winds** Weather Service employee surveyed damage and determined damage was the result of downburst winds. A small tree was blown down and a camper also had minor damage to roof. TEXAS, Western 02 02 1237CST-1327CST **TXZ035 High Winds** 2 0 High winds occurred in Lubbock during the early afternoon. Wind gusts of 51 knots (59 mph) were recorded by the National Weather Service at Lubbock International Airport from 1237 CST to 1327 CST. The high wind shattered glass at a business in Lubbock, and helped spread several grass fires in and around Lubbock County. TXZ029>032 0400CST-30 1700CST **Heavy Snow** The major snowstorm that moved from the Colorado Rockies across the Texas Panhandle als o brought snow (some of it heavy) to other parts of West Texas. Heavy snow fell in the northern South Plains, where Matador received ten inches of snow. Six to 8 inches fell in Floydada, with about five inches in Paducah and 4 inches in Plainview. Southern parts of West Texas (Permian Basin, Concho Valley) received less snow, but many locations reported one to three inches. **UTAH** 2300MST-**UTZ010** 04 2300MST 06 **Heavy Snow** A major winter storm invaded the northern portion of Utah with record snowfall along the Wasatch Mountains. Two cold fronts moved across the Wasatch Front during the 48 hour period producing as much as 70 inches of snow at Alta. Other totals for the storm included 68 inches at Snowbird, 49 inches at Brighton, 48 inches at Solitude, and 36 in ches at Park West. A new 24 hour snowfall record for Utah was set during this storm. From 1715 MST (5th) to 1515 MST (6th), Alta recorded 55.5 inches of snow, which broke the old 24 hour snowfall record of 45 inches set on the 22nd-23rd of November 1992. WASHINGTON

None reported.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Perso Killed	ber of ons Injured	Estima Dama Property	ge	January 1994  Character of Storm
WEST VIRGINIA	<b>\</b>								
WVZ001>004	04	0300EST- 1200EST			0	0	4	0	Heavy Snow
WVZ005>047	04	0100EST- 1900EST			3	5	7	0	Heavy Snow

The effects of this storm impacted the lives of many thousands of residents for days after the snow had stopped.

Innuery 100/

Rains of the previous evening turned to wet snow after mi dnight, as a storm moved from near Atlanta to Raleigh. Heavy snow began falling during the predawn hours as the storm center reached near Danville, Virginia. A burst of snow developed over the Kanawha Valley and moved north during the morning. Charleston received five inches of snow in the one hour ending at 0500EST. Elkins reported nine inches of snow in the two hours ending at 0700EST. Parkersburg had 12 inches of snow in the eight hours ending at 1100EST. In Middlebourne of Tyler County, 11 inches of snow had fallen by 0645EST, by 0930EST 11 more inches fell, resulting in 22 inches on the ground. These snow rates were among the greatest ever reported from a West Virginia snow storm.

#### WEST VIRGINIA Cont'd

Snow decreased by noon, but light snow continued to accumulate until evening. The region for m Charleston north, to Parkersburg, Wheeling, and Morgantown were left paralyzed. Parts of Ritchie, Tyler, Doddridge, and Wetzel Counties measured a storm total of 2.5 feet. Pleasants County had 20 to 25 inches of snow. The official observer at Hundred measured 30 inches on the ground, while Mannington had 25 inches, West Union 24, and Middlebourne 23. Other snow depths include d Moundsville 17, Parkersburg, Clarksburg, and Fairmont all with 16, Charleston and Morgantown 15, and Wheeling 14 to 16 inches. Elkin's snow depth went from an inch to 14 inches.

With the snow burst, coming after as much as an inch of rain, thousands of trees were uprooted. Trees on sloping hillsides were especially vulnerable. Evergreens, mainly pines, plus magnolia trees were hard hit, even on level terrain. One state agency estimates a quarter of the pine trees in the western lowlands were damaged or killed. Fallen trees damaged many parked cars and roofs to dwellings.

Travel in rural sections of Pleasants, Tyler, Ritchie, Wetzel, and Doddridge was still nearly impossible two days after the storm, due to fallen trees.

Electricity was out to an estimated 170,000 customers on the 4th, including many radio and T V stations. Even on the 8th, four days after the storm, electricity was still out to around 25,000 dwellings.

A state of emergency declared by the governor on the 4th, lasted till noon on the 13th. Emergency shelters were established throughout the lowlands, due to the loss of electricity. Army Nationa l Guard personnel used Humvee vehicles to evacuate people or to deliver supplies like kerosene or propane to rural areas.

Most stores were sold out of shovels, generators, kerosene, and sleds. Many grocery stores ran out of staple items. One bakery reported sales of bread were up 70% during the week.

A 70 year old man from Sharples of Logan County was killed when a tree fell on him while he was getting water from a spring. With no electricity, many people could not use their wells and resorted to nearby springs or creeks for their water.

A 51 year old man was killed in Cabin Creek of Kanawha County, when a landslide knocked a tree over on him. A 65 year old male died from hypothermia in his Wirt County home.

Damages from the storm, including utility companies, estimated at 15 million dollars. (M700)(M510)(M65P)

Wayne County Cabell County	07	9745EST-	0	0	2	0	Flood/Flash Flood
<b>Tyler County</b>	07 08	1130EST- 0100EST	0	0	3	0	Flood/Flash Flood
Lincoln County Kanawha County Barbour County							

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons	Estin Dam Propert	nated nage	January 1994
111 211111	Hale	Statitian	(MIN-S)	(Tanis)	Killen	- mjuren		<del>y 1114</del> 5	V 13130 PF 10 - SHOOL
Harrison County Lewis County Randolph County Tucker County Upshur County Logan County	07	1300EST-			0	0	2	0	
Doddridge County Pleasants County		1700EST			0	0	3	0	Flood/Flash Flood
Braxton County	07	1700EST- 2100EST			0	0	3	0	Flood/Flash Flood
	strea	am flooding.	Many st	tate and c	ounty 1	oads,	plus pri	vate br	o cause widespread minor small ridges were flooded. National ne and Cabell Counties.
WVZ040 Barbour County	07 08	1900EST- 1700EST			0	0	0	0	River Flood
WEST VIRGINIA	Cor	nt'd							
	to dv	Tygart Valley wellings occur, as the dam l	red. A fe	w roads w	nd 19 f ere blo	eet at I	Philippi The Tyg	, two fe gart Lak	et over flood stage. No damage e elevation rose 57 feet in three
WVZ001>047	15 16	0000EST- 1200EST			0	0	3	0	Extreme Cold
	Arct	tic air charge le digits acros	d into the	state early elevations	Saturd and be	lay the	15th. I	Daytime mount	e temperatures were only in the
	Sund time temp	day the 16th, d	awned wit years, sind the date v	h temperati ce Dec. 198 vere set at	ures of 1 89, that Charle	10 to 15 many ston ar	be low low ele nd Elkir	zero be vation t is, with	sing widespread. It was the first owns were below zero. Record -12 and -18 respectively. The
WVZ001>047	17	0300EST- 1800EST			0	0	5	0	Heavy Snow
	a co State alrea was	old dome of a les Route 50 co lidy fallen arou	ir over the rridor duri ınd Parkeı ng steady	e Ohio Val ing the pre rsburg, Cla in the Ch	lley. A dawn h arksburg arlestor	band o ours. I g, Morg n, Beck	of heavy By dawi gantown dey, an	y snow n, four t n, and W d Elkin	Valleys, was forced to rise over streaked east across the Unite d o eight inches of new snow had theeling. Meanwhile, the snow s region. Snow diminished by
	Snov and	w depths incre Williamson, p	ased four i	nches, to a far northe	s much rn cour	as eigl	ht inche Hancoo	s, in the ck and I	e extreme south around Beckley Brooke.
	region of a cause Mide	on plus around foot, to as mud sed the snow	Wheeling th as 18 in depth to 19 inches	and Mound nches, acro increase	dsville. ss porti from	The hons of	eaviest the nor 25 inch	totals, r thern lo es at M	Huntington, Charleston, Elkin s resulted in snow depth increases wlands. Specifically, the storm fannington, 7 to 23 inches a tersburg, 2 to 16 at Morgantown,
	A Reused	ed Cross shelte l 4-wheel driv	er was ope e vehicles	ned in Park s to reach t	kersburg hem.	g for m	otorists	strande	ed on Interstate 77. State Police
	apar	tment buildin	g and a so	chool in Pa	arkersbı	ırg, a b	ousiness	in Elm	cctions of roofs to collapse at an Grove of Ohio County, a larg e Tyler County.
	One Cou	indirect death nty after her v	from the s rehicle slice	torm was a d on ice an	45 yea d overt	ır old w urned i	oman.	She dro	owned in Rich Creek of Monroe
WVZALL	18 19	0000EST- 2400EST			3	5	6	0	Extreme Cold

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nur Per Kille	nber of sons	Est Da Prope	imated mage	January 1994 Character of Storm
	dimi		peratures f	ell to near	zero oi				s hours after the steady snow had e 18th. Readings fell below zero
	Tem 30.	peratures of -	-15 to -25 v ouds and wi	vere widesp ind kept the	oread. I	Many ru	ral val	leys in	corded history for West Virginia. the west were minus 25 to minus enbrier Valley from being colder
	Cou	coldest tem nty, three deg er, a new stat	grees shy of	the state r	ecord.	If the c	enter o	ta was of the hi	-34 from Middlebourne of Tyle r gh pressure was four to six hours
	expe cour and	ected until a nties, causing	after the tu g power ou ng plants co	rn of the cutages. Co	entury ensume	. Powers were	r dema asked	ınds did to cut b	One company reported a load not exceed supply at dawn in som e back their usage. Many chemical reburg even told all businesses in
WEST VIRGINI	A Cor	nt'd							
		major wate							ls, schools, and office buildings. faucets being left on and broke n
	Cou wee	nty office of ks of the mo	f the Red onth.	Cross repo	rted sh	elters v	vere op	en for	s, including the food. The Wood seven days during the first thre e
	The cold	two largest	insurance o	companies	reporte	ed arou	nd 6,00	00 claim	s from both the snow and severe
		second state day the 23rd		ncy declare	d by th	ie gove	nor thi	s month	n lasted from Monday the 17th to
	stucl pois mon hosp elec	k in the snow oning from oxide poison italized with	their over their over ning cause a body ten was too	un County worked fu d by poorl mperature	couple rnace. y venti of 89 d	was fo Three lated ke egrees.	und de Morga erosene Her n	ad in th ntown r heaters nobile h	e. His 4-wheel drive vehicle was eir home, from carbon monoxide esidents were treated for carbo n s. One Morgantown woman was ome had caught on fire, when an ed outside in her bed clothes.
<b>Tyler County</b>	26	0300EST- 1000EST			0	0	3	0	Flood/Flash Flood
	Milo	ler temperati	ures and ic	e jams cau	ised mi	nor floo	oding a	long M	iddle Island and Indian Creeks.
Ohio County Wheeling	26	1200EST- 2000EST			0	0	5	0	Flood/Flash Flood
<b>Marshall County</b>	26	1200EST- 2000EST			0	0	4	0	Flood/Flash Flood
	Dim An i Bac	meydale sect ce jams forn	tions of Wh ned on Wh ed minor f	neeling. Ser eeling Cre flooding fo	veral ca ek in th or abou	rs were ne vicin t two r	subme ity of t niles u	rged an he Junio pstream	any homes in the Pleasanton and d many basements were flooded. or Street Bridge near Elm Grove. into Marshall County. Twelv e v Avenue.
WVZ001-004, 009- 012,017,019-022,031 Northwestern Coun		1000507							
	27 28	1800EST- 0600EST			0	0	0	0	Heavy Rain

Heavy rain fell across Ohio, western Pennsylvania, and northwest West Virginia. Rainfall of an inch to 1.8 inches was recorded. Wheeling measured 1.8 inches, Hannibal Lock & Dam 1.75, and Middlebournes 1.73. Runoff of the heavy rain, combined with snowmelt to cause widespread stream

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estin Dam Propert		January 1994
	flood	ding.	,	, ,		J	•		
<b>Tyler County</b>	28	0300EST- 1800EST			0	0	5	0	Flood/Flash Flood
Hancock County Brooke County Ohio County Marshall County	28	0300EST- 0300EST			0	0	5	0	Flood/Flash Flood
Wetzel County Pleasants County Doddridge County Ritchie County	28	0700EST- 1900EST			0	0	5	0	Flood/Flash Flood
Marion County Monongalia County	28	1000EST- 1500EST-			0	0	5	0	Flood/Flash Flood

#### WEST VIRGINIA Cont'd

The most severe flooding occurred along Wheeling Creek in Ohi o County, along Middle Island Creek in Tyler County, and along both forks of the Hughes River in Ritchie County. Parts of Wheelin g were under two to four feet of water as Wheeling Creek crested slightly above its seven foot flood stage. In Cairo of Ritchie County, stores had six inches of mud inside after the water receded.

A small dam burst on a coal company impoundment in Granville of Monongalia County. Threatened residents were evacuated before the dam failed. The rushing water knocked two walls down of one house and flushed out the contents of its basement and first floor. The washing machine was found 100 yards away in a ditch.

Flooding from Buffalo Creek affected many homes and businesses in Mannington.

Flooding also occurred along Harmon, Buffalo, Cross, Big Grave, and Fish Creeks in the northern panhandle.

Estimated damage from the small stream and headwater river flooding was around \$500,000.

#### WVZ005>012 Ohio River Counties

28 1800EST-31 0700EST

0 1 5 0 River Flood

The Ohio River crested two to six feet over flood stage from Willow Island Lock & Dam in Pleasants County to Point Pleasant in Mason County. Below the confluence of the Kanawha River, the Ohio River crested near flood stage to Huntington. The crest at Parkersburg was 39.4 feet, 49.7 feet at Pomeroy Mason, 46.0 feet at Point Pleasants, and 50.4 feet at Huntington.

In Wood County, 150 families and 25 businesses were flooded, especially along Happy Valley Road due to backwater into the Little Kanawha River. The Red Cross reported that most damage was limited to carpets. No major structural damage was reported.

Two men were rescued by tethered boat from atop their pickup truck along a submerged campground road. The road was adjacent to the lower Little Kanawha River in Wood County. One of the men was treated for hypothermia.

WVZ009-012,017-019, 022 Parkersburg to Morgantown

Corridor

01-31

? ? ? Record Snowfall

The mid Ohio Valley town of Parkers burg saw 39.6 inches of snowfall. This surpasses the snowfall for any monthy since a weather station opened in 1888. The previous record for the snowiest month at Parkersburg was 34.6 inches in November, 1950.

At Morgantown, the monthly snowfall was 39.7 inches, also the most on record for any month. The previous record monthly snowfall at Morgantown was 33.3 inches in January, 1978.

Middlebourne of Tyler County had a monthly snowfall of 47 inches.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	nber of sons Injured	Estii Dar Proper	nated nage ty Crops	January 1994			
WISCONSIN												
WIZ006-007-015> 017-022>032-035> 040-042>052-056> 060-063-065>072- Central and Southern	05 06	1200CST- 0500CST			0	0	?	0	Heavy Snow			
Wisconsin	com close at N inch	mon with an a ed or students ledford (Tavl	rea of eig dismissed or County	tht to ten in early and a v). Port Ed	nches ol a nu mbe wards (	bserved er of ac Wood	l in the cidents County	central were re and D	wfall of four to eight inches were parts of the state. Schools were eported. Ten inches of snow fell burand (Pepin County) with nin e pewa County) and Colfax (Dunn			
WIZ001>004 Lake Superior Snowbelt	07 08	1400CST- 0900CST			0	0	?	0	Heavy Snow			
WISCONSIN Con	ıt'd											
	snov acci	w squalls ove	er the sno fall totals	wbelt regi	on. Fro 14 incl	om 6 to hes at V	o 14 inc Washbu	hes of	f Lake Superior generated heavy snow fell which lead to severa l yfield County) and 12 inches a t			
WIZALL Statewide	$\frac{13}{20}$	9288E§T-			0	0	?	0	Cold			
	reco 80 b on t busi cand fros	An extended period of extremely cold weather gripped the state. Brisk winds at times combined with record setting sub zero temperatures down to 50 below zero at night to create wind chill readings to 80 below zero. The coldest temperature recorded was 50 below zero at Couderay (Swayer County) on the morning of the 19th. During the cold spell numerous schools closed for days at a time, businesses reduced hours, sporting events, winter fest activities, and local government meetings were cancelled. Also many water mains broke and vehicles refused to start. Some people receive d frostbite and suffered from hypothermia. Heat and power failed in many homes, businesses, and schools. Natural gas and heating oil was consumed at record levels.										
WIZ025-028-032- 034-041>047-049>	16 16	0400CST- 1800CST			0	0	?	0	Heavy Snow			
053-055>058-063 West-Central, South-Central, East-Central Wisconsin	east- at Ri	central Wisco	nsin. Seve (Richland	eral accide l County) a	nts wer	e repor t inches	ted. Sr	ow me	s west- central, south-central and asurements included nine inches empealeau County), Two Rivers			
WIZ004>072 All But Far Northwest	26 28	2000CST- 1800CST			0	0	?	0	Heavy Snow/Ice Storm			
Wisconsin	free cond Cold snow Man high	zing rain and litions to the st der air invad wfall of 6 to 1	freezing ate along ed the ard 2 inches ok place, s mounts inc	drizzle to with one to ea during occurred a schools we cluded 13.7	Wiscor three in the 27th mainly ere shut inches	nsin. S nches on h and of over the down a at Gree	leet and of light changed e centra and pow n Lake	I freezi snow o l the pual and ever outa	eather in the form of snow, sleet, ng rain brought hazardous icin g on the 26th and early on the 27th. recipitation to all snow. Heav y east-central sections of the state ages were reported. Some of the Lake County), 13 inches at Two go County).			
HAWAII			J				•		•			
	Non	e reported.										
PACIFIC	Non	e reported.										

	Time	Path	Path	Number of	Estimated	January 1994
	Local/	Length	Width	Persons	Damage	•
Location	Date Standard	(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

	Time Local/	Path Length	Path Width	Number of Persons	Estimated Damage	January 1994
Location	Data Standard	(Miles)	(Varde)	Killed Injured	Property Crops	Character of Storm

Time Path Path Number of Estimated January 1994

Local/ Length Width Persons Damage

Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

Time Path Path Number of Estimated January 1994

Local/ Length Width Persons Damage

Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

Time Path Path Number of Estimated January 1994

Local/ Length Width Persons Damage

Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm